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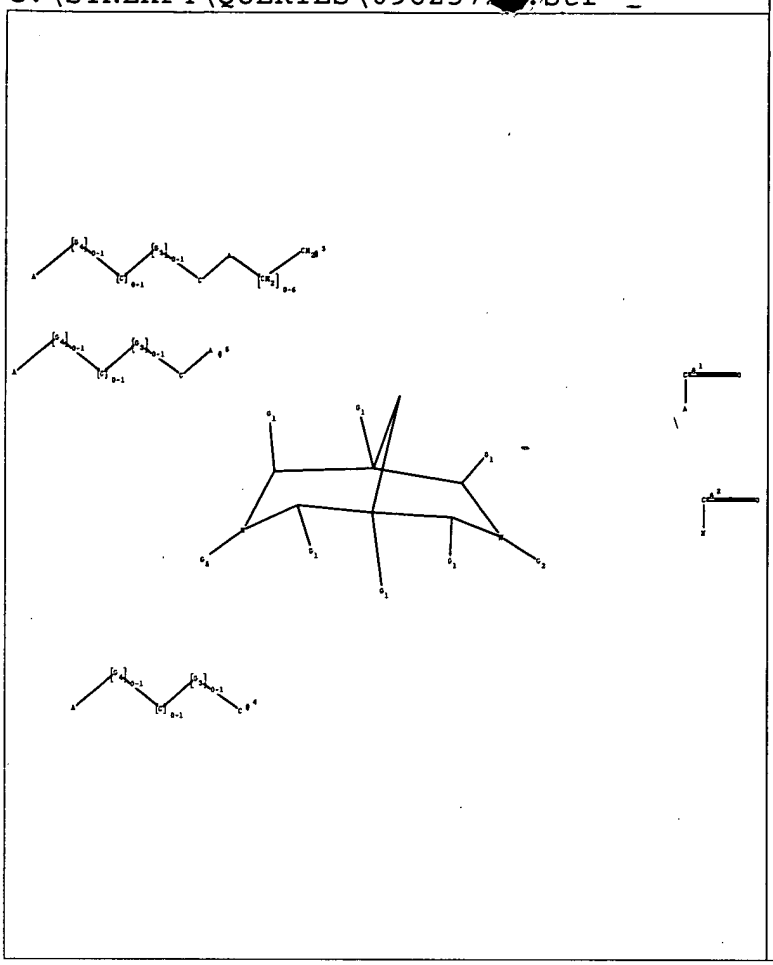

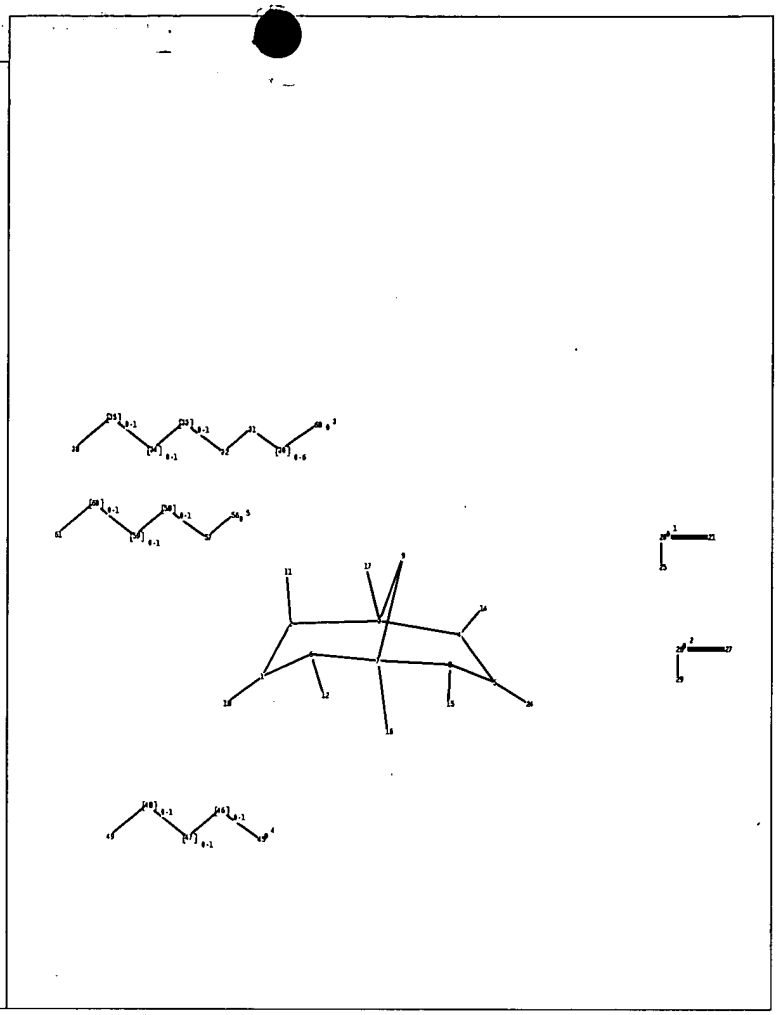

chain nodes :
11 12 14 15 16 17 18 20 21 24 25 26 27 30 31 32 33 34
35 45 46 47 48 56 57 58 59 60 68
ring nodes :
1 2 3 4 5 6 7 8 9
ring/chain nodes :
29 38 49 61
chain bonds :
1-18 2-11 3-17 4-14 5-24 6-12 7-16 8-15 20-21 20-25 26-27
26-29 30-31 30-68 31-32 32-33 33-34 34-35 35-38 45-46 46-47
47-48 48-49 56-57 57-58 58-59 59-60 60-61
ring bonds :
1-2 1-6 2-3 3-4 3-9 4-5 5-8 6-7 7-8 7-9
exact/norm bonds :
1-2 1-6 1-18 2-3 2-11 3-4 3-9 3-17 4-5 4-14 5-8 5-24 6-7
6-12 7-8 7-9 7-16 8-15 20-21 20-25 26-27 26-29 30-31 31-32
32-33 33-34 34-35 35-38 45-46 46-47 47-48 48-49 56-57 57-58
58-59 59-60 60-61
exact bonds :
30-68
isolated ring systems :
containing 1 :

G1:Ak,H

G2:H,[*1],[*2]

G3:C,N

G4:C,O

G5:H,[*3],[*4],[*5]

Match level :

1:Atom	2:Atom	3:Atom	4:Atom	5:Atom	6:Atom	7:Atom	8:Atom	9:Atom
11:CLASS	12:CLASS	14:CLASS	15:CLASS	16:CLASS	17:CLASS	18:CLASS		
20:CLASS	21:CLASS	24:CLASS	25:CLASS	26:CLASS	27:CLASS	29:CLASS		
30:CLASS	31:CLASS	32:CLASS	33:CLASS	34:CLASS	35:CLASS	38:CLASS		
45:CLASS	46:CLASS	47:CLASS	48:CLASS	49:CLASS	56:CLASS	57:CLASS		
58:CLASS	59:CLASS	60:CLASS	61:CLASS	68:CLASS				

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=> d his

     (FILE 'HOME' ENTERED AT 11:59:19 ON 12 SEP 2001)

     FILE 'REGISTRY' ENTERED AT 11:59:24 ON 12 SEP 2001
L1                STRUCTURE UPLOADED
L2                QUE L1
L3             20 S L2

     FILE 'STNGUIDE' ENTERED AT 12:00:33 ON 12 SEP 2001

     FILE 'REGISTRY' ENTERED AT 12:08:23 ON 12 SEP 2001
L4            399 S L2 SSS FUL

     FILE 'CAPLUS' ENTERED AT 12:08:34 ON 12 SEP 2001
L5            102 S L4

     FILE 'REGISTRY' ENTERED AT 12:09:30 ON 12 SEP 2001
L6             10 S BISPIDINE
L7            505 S C7H14N2/MF
L8              1 S L7 AND L6
L9           2255 S 354.23?/RID

     FILE 'CAPLUS' ENTERED AT 12:15:24 ON 12 SEP 2001
L10            76 S L5 AND JOURNAL/DT
L11             4 S L10 AND 2000/SO
L12             5 S L10 AND 2001/SO
L13            97 S L5 NOT L12

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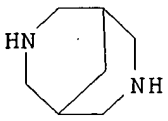
L13 ANSWER 1 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2001:537517 CAPLUS
DN 135:123343
TI Preparation of thiolamide curing agents
IN Krebaum, Paul
PA Molex Incorporated, USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6265519	B1	20010724	US 1998-206821	19981208

OS MARPAT 135:123343
AB Present invention relates to thiolamide curing agents and methods for their prepn. and use. The thiolamide curing agents are the reaction product of a thiol contg. compd. and an amine contg. compd. Thus, 800 g Jeffamine T 3000 and 80 g 3-mercaptopropionic acid were reacted in the presence of Tyzor TBT and anhyd. methanesulfonic acid in toluene to give a thiolamide curing agent. Bisphenol F epoxy resin (3.5 g) was set to a gel within 10 min in the presence of 25 g thiolamide curing agent and 0.5 g diazabicycloundecene.
IT **280-74-0**, 3,7-Diazabicyclo[3.3.1]nonane
RL: CAT (Catalyst use); USES (Uses)
(catalyst; prepn. of thiolamide curing agents)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



RE.CNT 11
RE
(2) Armbruster; US 4894431 1990 CAPLUS
(3) Cantor; US 5703138 1997 CAPLUS
(4) Cantor; US 5712321 1998 CAPLUS
(5) Giovando; US 5310826 1994 CAPLUS
(6) Goel; US 4696992 1987 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

applicants

L13 ANSWER 2 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:900637 CAPLUS
DN 134:56700
TI Preparation of new bispidines useful in the treatment of cardiac arrhythmias
IN Alstermark, Christer; Andersson, Kjell; Bjore, Annika; Bjorsne, Magnus; Lindstedt, Alstermark Eva-Lotte; Nilsson, Goran; Polla, Magnus; Strandlund, Gert; Ortengren, Ylva
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000077000	A1	20001221	WO 2000-SE1254	20000615

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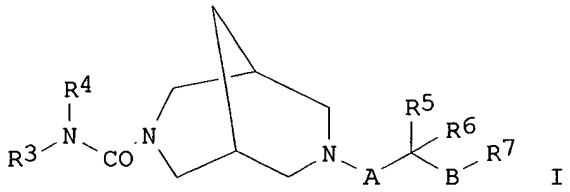
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI SE 1999-2268 A 19990616
OS MARPAT 134:56700
GI



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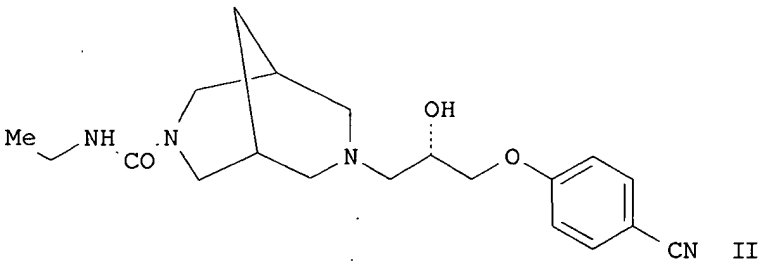


II

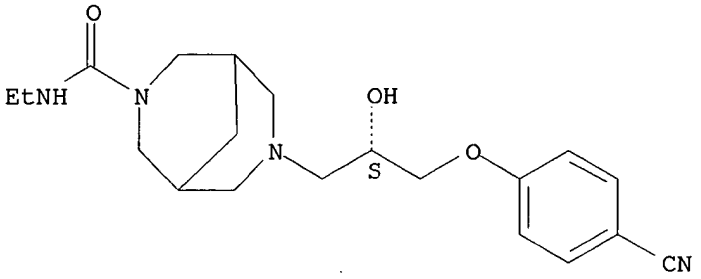
AB Bispidines, such as I [R3 = H, alkyl; R4 = H, alkyl, alkoxy; NR3R4 = heterocyclyl; R5 = H, halogen, alkyl, alkoxy, acyloxy, alkylsulfonyloxy, carbamoyl, etc.; R6 = H, alkyl; R5R6 = O; R7 = alkyl, aryl, heterocyclyl; A, B = bond, linking group, such as alkylene, etc.], were prepd. for pharmaceutical use in the treatment of cardiac arrhythmias, in particular atrial and ventricular arrhythmias. Thus, bispidine II was prepd. with

51% yield by amidation of (S)-4-[3-(3,7-diazabicyclo[3.3.1]non-3-yl)-2-hydroxypropoxy]benzonitrile with Et isocyanate. The prepd. bispidines were tested for primary electrophysiol. effects in anesthetized guinea pigs.

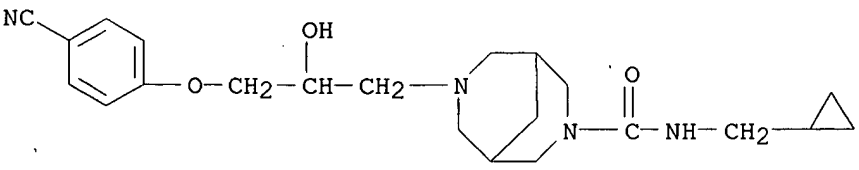
IT **313475-71-7P 313475-73-9P 313475-75-1P**
313475-77-3P 313475-79-5P 313475-82-0P
313475-84-2P 313475-86-4P 313475-88-6P
313475-90-0P 313475-92-2P 313475-95-5P
313475-97-7P 313475-99-9P 313476-02-7P
313476-05-0P 313476-07-2P 313476-09-4P
313476-11-8P 313476-13-0P 313476-15-2P
313476-18-5P 313476-20-9P 313476-23-2P
313476-26-5P 313476-28-7P 313476-29-8P
313476-31-2P 313476-34-5P 313476-37-8P
313476-39-0P 313476-41-4P 313476-43-6P
313476-44-7P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)

RN 313475-71-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

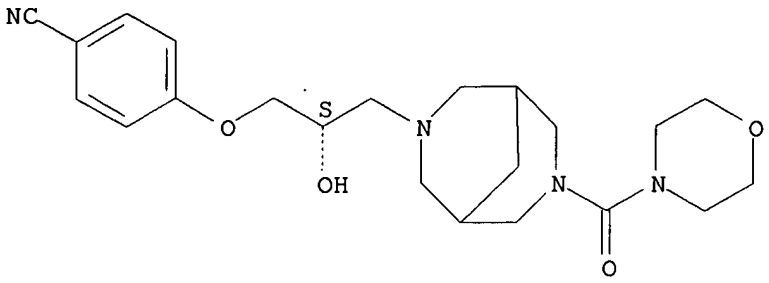


RN 313475-73-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-(cyclopropylmethyl)- (9CI) (CA INDEX NAME)

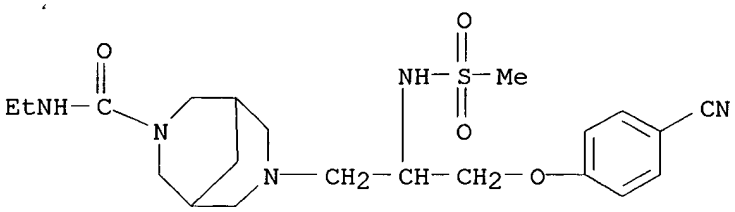


RN 313475-75-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-ethanol, .alpha.-[(4-cyanophenoxy)methyl]-7-(4-morpholinylcarbonyl)-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

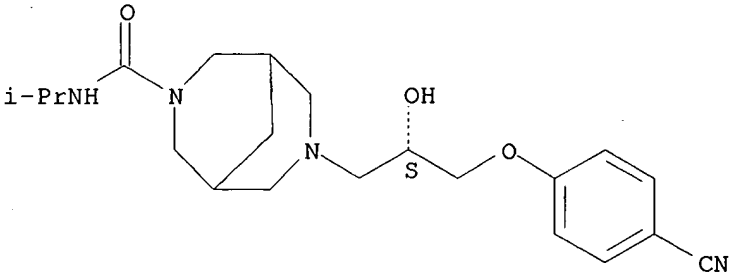


RN 313475-77-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-[(methylsulfonyl)amino]propyl]-N-ethyl- (9CI) (CA INDEX NAME)



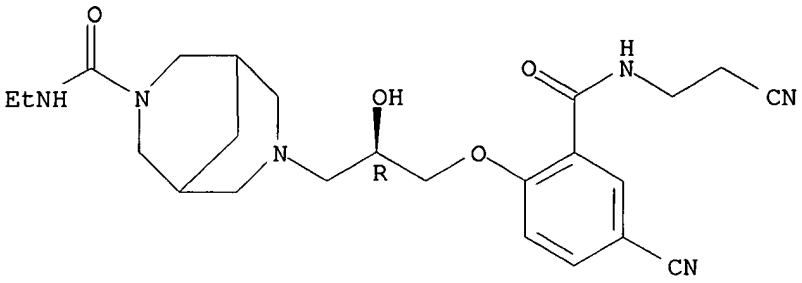
RN 313475-79-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



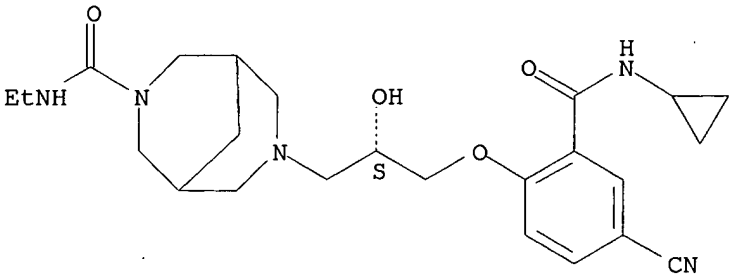
RN 313475-82-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[(2R)-3-[4-cyano-2-[[(2-cyanoethyl)amino]carbonyl]phenoxy]-2-hydroxypropyl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

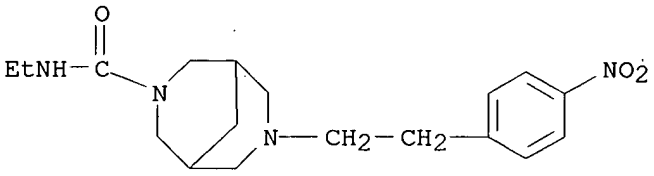


RN 313475-84-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[(2S)-3-[4-cyano-2-[(cyclopropylamino)carbonyl]phenoxy]-2-hydroxypropyl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

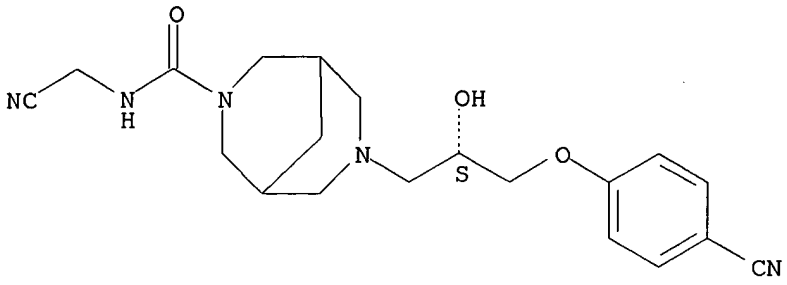


RN 313475-86-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl-7-[2-(4-nitrophenyl)ethyl]- (9CI) (CA INDEX NAME)

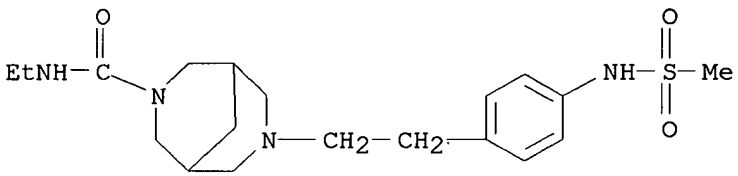


RN 313475-88-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(cyanomethyl)-7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

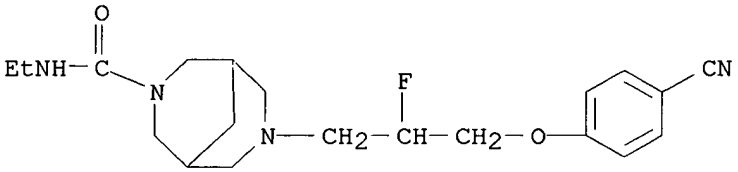
Absolute stereochemistry.



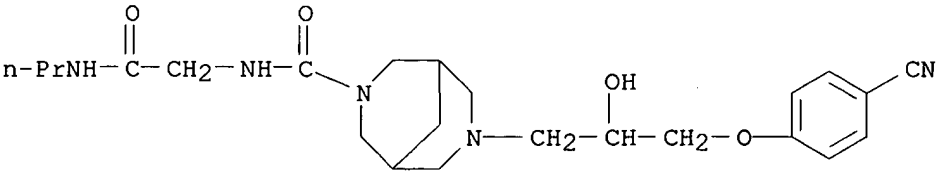
RN 313475-90-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl-7-[2-[4-[(methylsulfonyl)amino]phenyl]ethyl]- (9CI) (CA INDEX NAME)



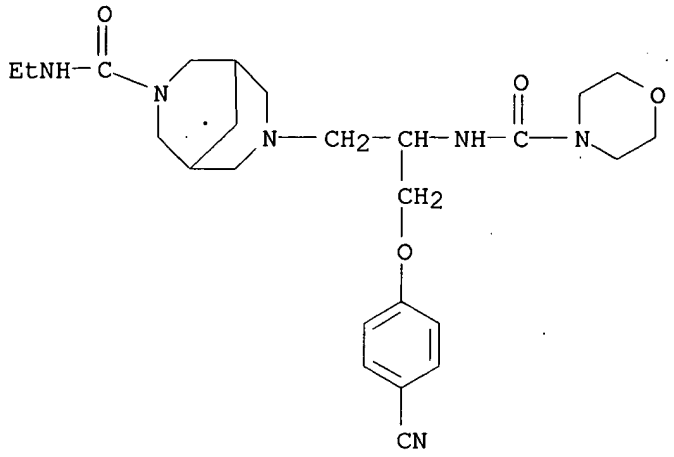
RN 313475-92-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-fluoropropyl]-N-ethyl- (9CI) (CA INDEX NAME)



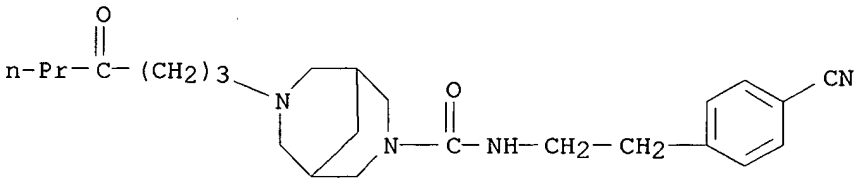
RN 313475-95-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-[2-oxo-2-(propylamino)ethyl]- (9CI) (CA INDEX NAME)



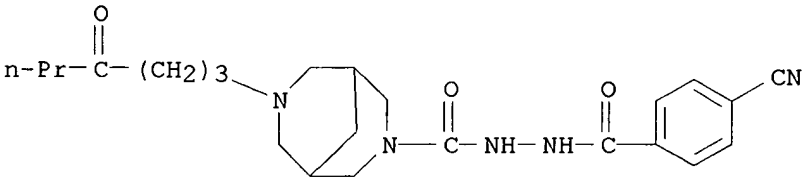
RN 313475-97-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-[(4-morpholinylcarbonyl)amino]propyl]-N-ethyl- (9CI) (CA INDEX NAME)



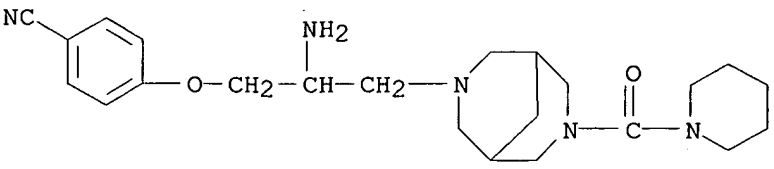
RN 313475-99-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-[2-(4-cyanophenyl)ethyl]-7-(4-oxoheptyl)- (9CI) (CA INDEX NAME)



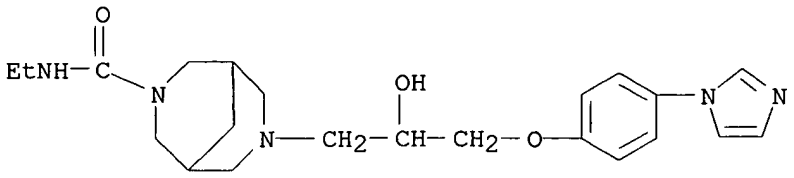
RN 313476-02-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(4-oxoheptyl)-, 2-(4-cyanobenzoyl)hydrazide (9CI) (CA INDEX NAME)



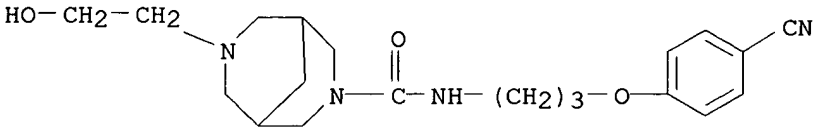
RN 313476-05-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-ethanamine, .alpha.-[(4-cyanophenoxy)methyl]-7-(1-piperidinylcarbonyl)- (9CI) (CA INDEX NAME)



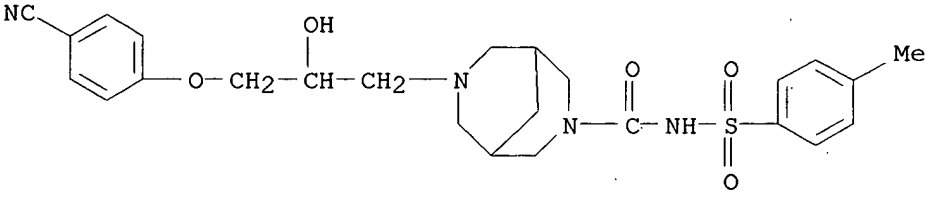
RN 313476-07-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl-7-[2-hydroxy-3-[4-(1H-imidazol-1-yl)phenoxy]propyl]- (9CI) (CA INDEX NAME)



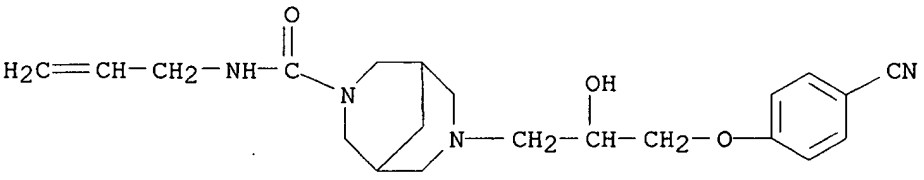
RN 313476-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-[3-(4-cyanophenoxy)propyl]-7-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



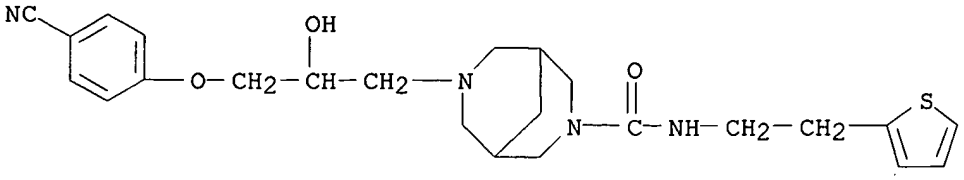
RN 313476-11-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



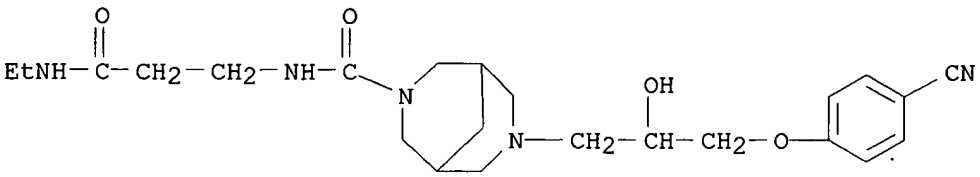
RN 313476-13-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-2-propenyl- (9CI) (CA INDEX NAME)



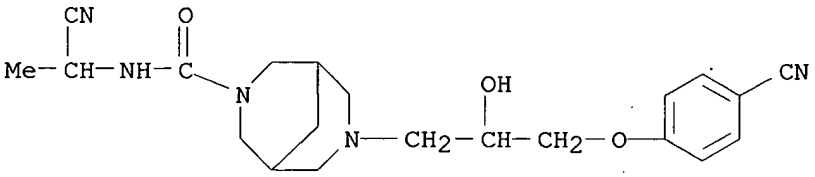
RN 313476-15-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-[2-(2-thienyl)ethyl]- (9CI) (CA INDEX NAME)



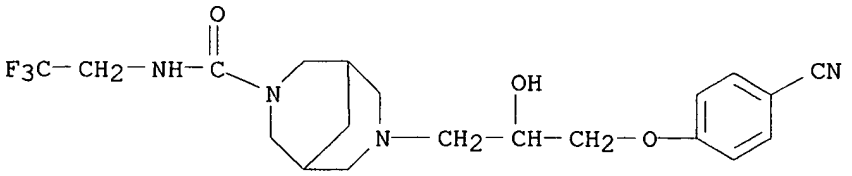
RN 313476-18-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-[3-(ethylamino)-3-oxopropyl]- (9CI) (CA INDEX NAME)



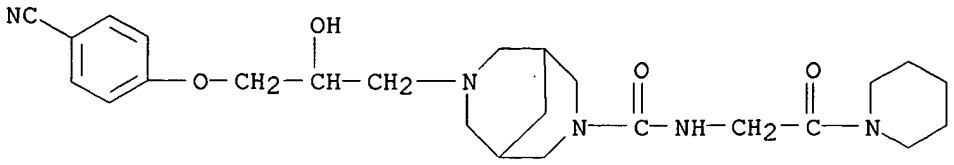
RN 313476-20-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(1-cyanoethyl)-7-[3-(4-cyanophenoxy)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)



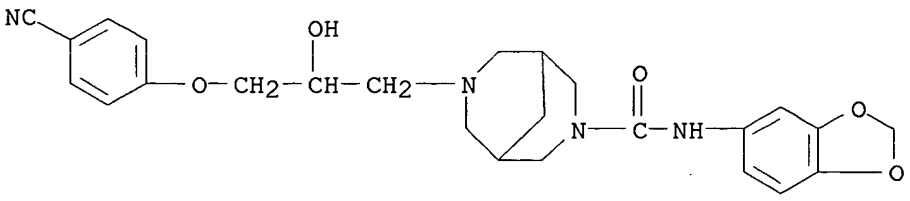
RN 313476-23-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



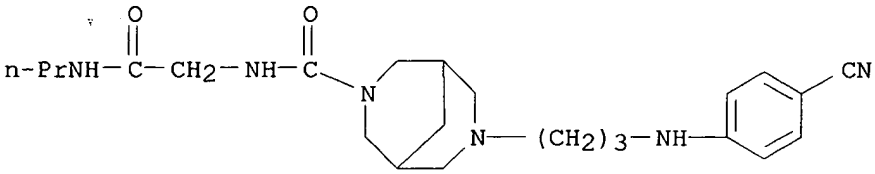
RN 313476-26-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-[2-oxo-2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)



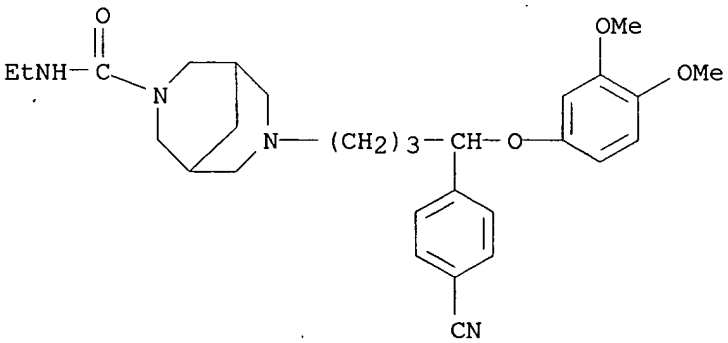
RN 313476-28-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-1,3-benzodioxol-5-yl-7-[3-(4-cyanophenoxy)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)



RN 313476-29-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-[(4-cyanophenyl)amino]propyl]-N-[2-oxo-2-(propylamino)ethyl]- (9CI) (CA INDEX NAME)

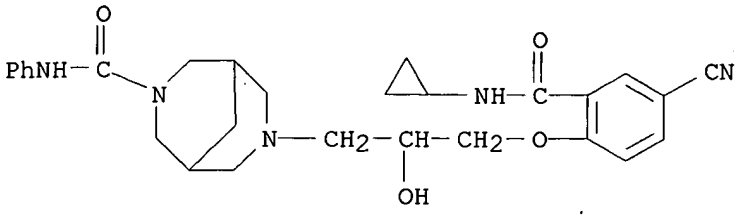


RN 313476-31-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[4-(4-cyanophenyl)-4-(3,4-dimethoxyphenoxy)butyl]-N-ethyl- (9CI) (CA INDEX NAME)

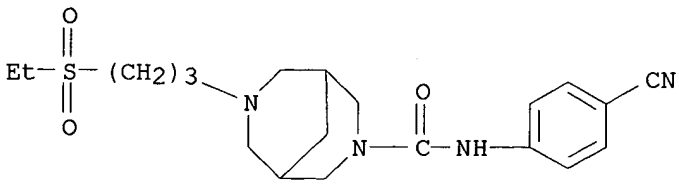


RN 313476-34-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-[4-cyano-2-

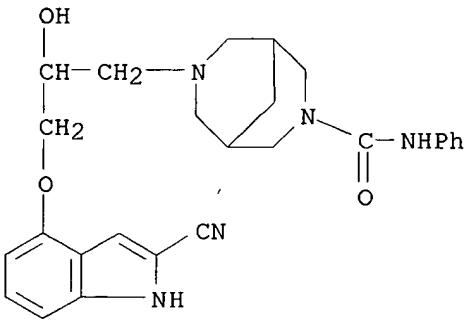
[(cyclopropylamino)carbonyl]phenoxy]-2-hydroxypropyl]-N-phenyl- (9CI) (CA INDEX NAME)



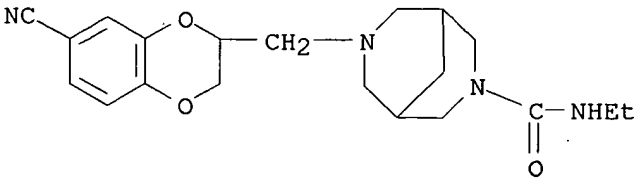
RN 313476-37-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(4-cyanophenyl)-7-[3-(ethylsulfonyl)propyl]- (9CI) (CA INDEX NAME)



RN 313476-39-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-[(2-cyano-1H-indol-4-yl)oxy]-2-hydroxypropyl]-N-phenyl- (9CI) (CA INDEX NAME)



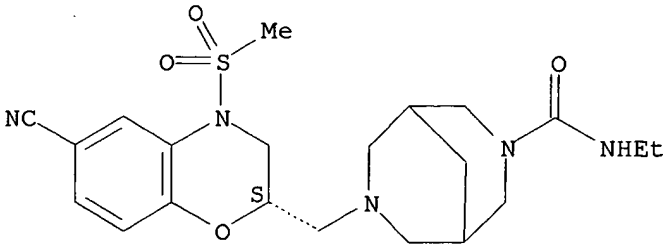
RN 313476-41-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[(7-cyano-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-ethyl- (9CI) (CA INDEX NAME)



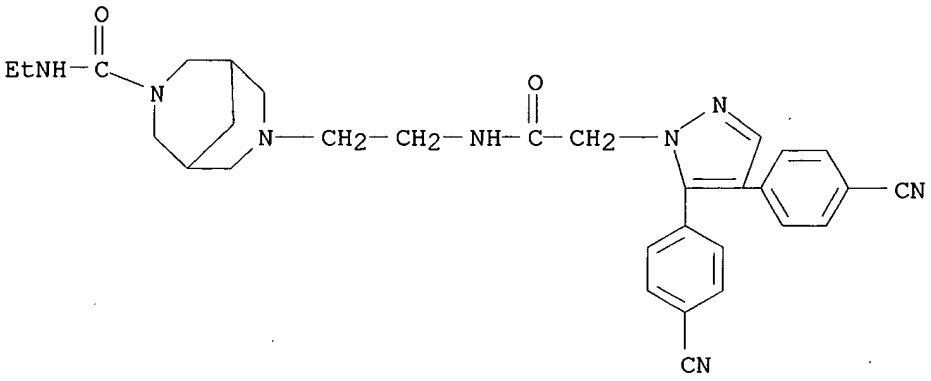
RN 313476-43-6 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[[(2S)-6-cyano-3,4-dihydro-4-(methylsulfonyl)-2H-1,4-benzoxazin-2-yl]methyl]-N-ethyl- (9CI) (CA INDEX NAME)

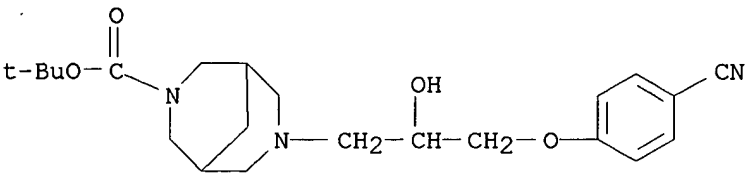
Absolute stereochemistry.



RN 313476-44-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[2-[[[4,5-bis(4-cyanophenyl)-1H-pyrazol-1-yl]acetyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

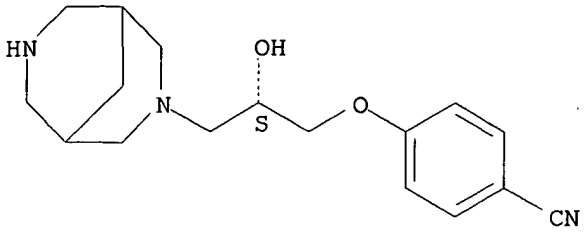


IT **227939-99-3 313477-26-8 313477-39-3**
RL: RCT (Reactant)
(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)
RN 227939-99-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

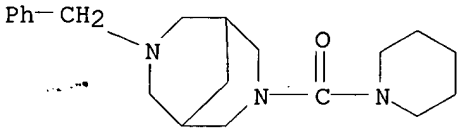


RN 313477-26-8 CAPLUS
CN Benzonitrile, 4-[(2S)-3-(3,7-diazabicyclo[3.3.1]non-3-yl)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)

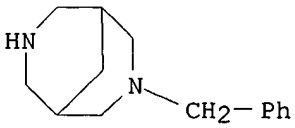
Absolute stereochemistry.



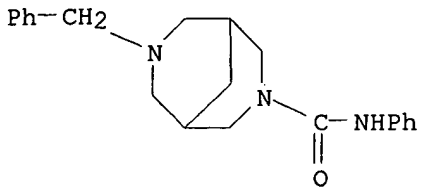
RN 313477-39-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)-7-(1-piperidinylcarbonyl)-(9CI) (CA INDEX NAME)



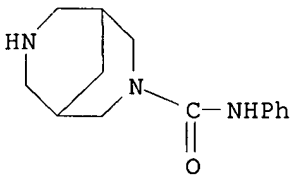
IT **69407-32-5P 122455-64-5P 122455-81-6P**
227940-70-7P 227940-71-8P 227940-72-9P
227940-73-0P 312955-28-5P 313476-52-7P
313476-53-8P 313476-54-9P 313476-55-0P
313476-56-1P 313476-63-0P 313476-65-2P
313476-70-9P 313476-71-0P 313476-74-3P
313476-76-5P 313476-77-6P 313476-86-7P,
3,7-Diazabicyclo[3.3.1]nonane-3-ethanol **313476-88-9P**
313476-91-4P 313476-93-6P 313476-94-7P
313477-00-8P 313477-03-1P 313477-05-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)
RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



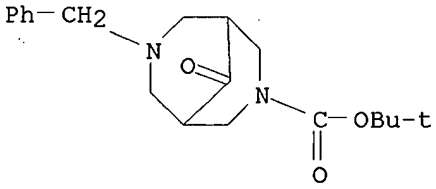
RN 122455-64-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-phenyl-7-(phenylmethyl)-(9CI) (CA INDEX NAME)



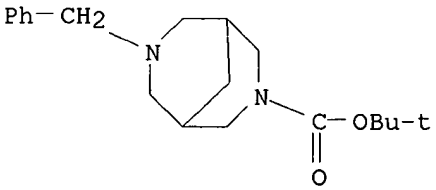
RN 122455-81-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-phenyl- (9CI) (CA INDEX NAME)



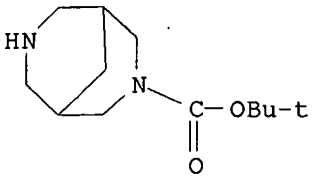
RN 227940-70-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-oxo-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



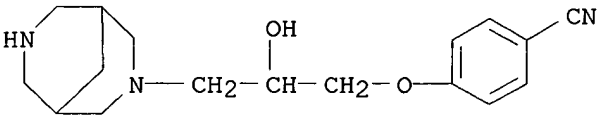
RN 227940-71-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



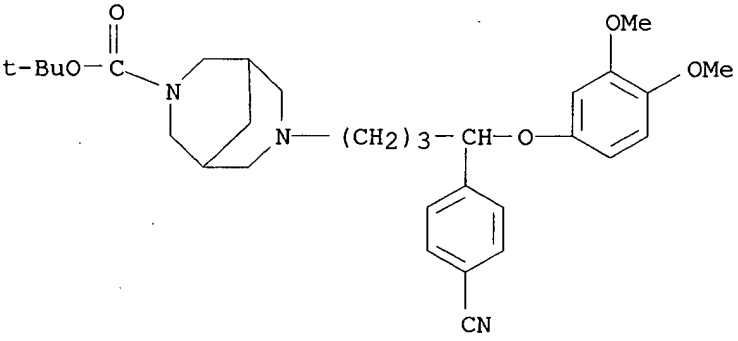
RN 227940-72-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



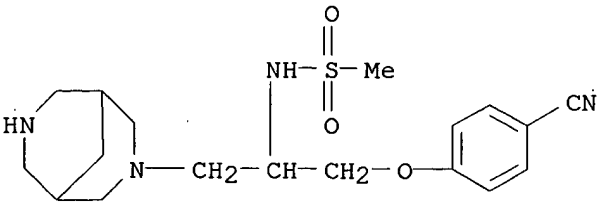
RN 227940-73-0 CAPLUS
CN Benzonitrile, 4-[3-(3,7-diazabicyclo[3.3.1]non-3-yl)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)



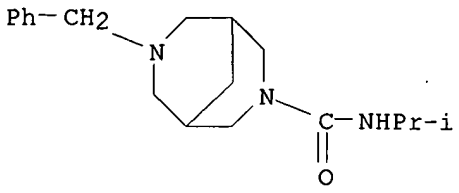
RN 312955-28-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-(3,4-dimethoxyphenoxy)butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



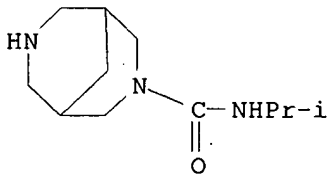
RN 313476-52-7 CAPLUS
CN Methanesulfonamide, N-[2-(4-cyanophenoxy)-1-(3,7-diazabicyclo[3.3.1]non-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)



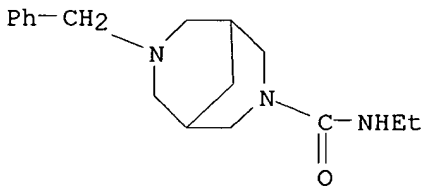
RN 313476-53-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(1-methylethyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



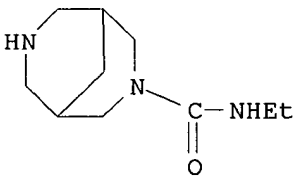
RN 313476-54-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(1-methylethyl)- (9CI) (CA INDEX NAME)



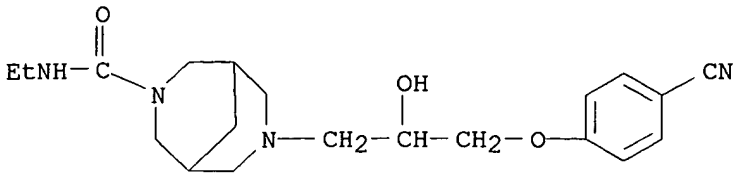
RN 313476-55-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



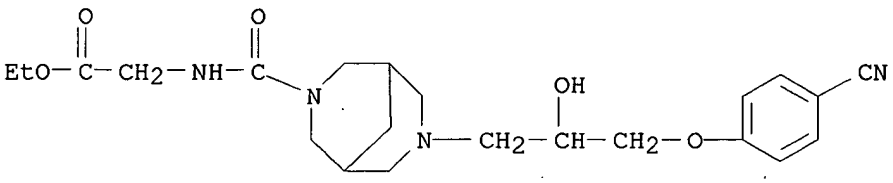
RN 313476-56-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl- (9CI) (CA INDEX NAME)



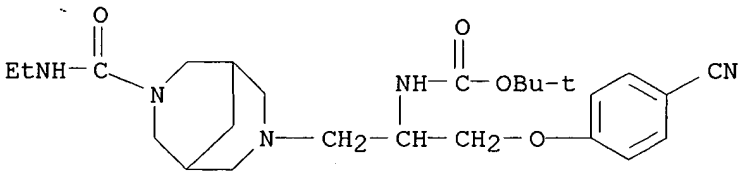
RN 313476-63-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-N-ethyl- (9CI) (CA INDEX NAME)



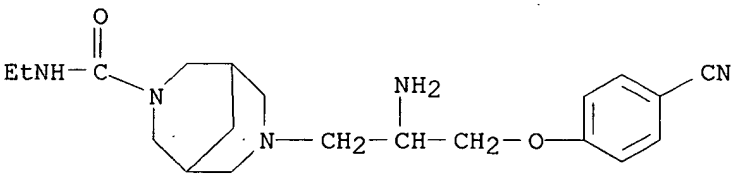
RN 313476-65-2 CAPLUS
CN Glycine, N-[[7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-3,7-diazabicyclo[3.3.1]non-3-yl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)



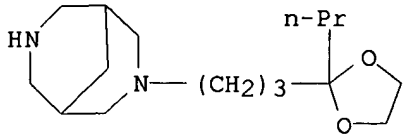
RN 313476-70-9 CAPLUS
CN Carbamic acid, [2-(4-cyanophenoxy)-1-[[7-[(ethylamino)carbonyl]-3,7-diazabicyclo[3.3.1]non-3-yl]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



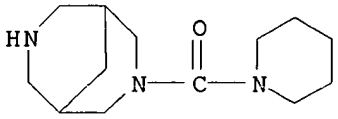
RN 313476-71-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[2-amino-3-(4-cyanophenoxy)propyl]-N-ethyl- (9CI) (CA INDEX NAME)



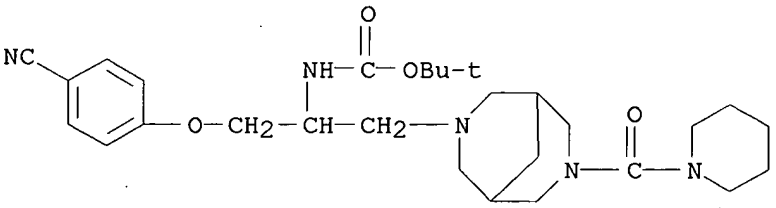
RN 313476-74-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[3-(2-propyl-1,3-dioxolan-2-yl)propyl]- (9CI) (CA INDEX NAME)



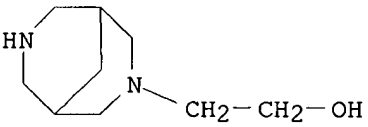
RN 313476-76-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-piperidinylcarbonyl)- (9CI) (CA INDEX NAME)



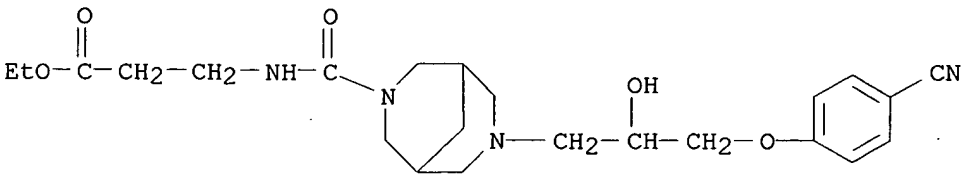
RN 313476-77-6 CAPLUS
CN Carbamic acid, [1-[(4-cyanophenoxy)methyl]-2-[7-(1-piperidinylcarbonyl)-3,7-diazabicyclo[3.3.1]non-3-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 313476-86-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-ethanol (9CI) (CA INDEX NAME)

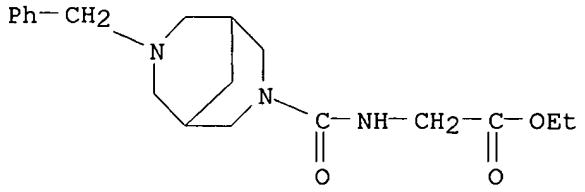


RN 313476-88-9 CAPLUS
CN .beta.-Alanine, N-[[7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-3,7-diazabicyclo[3.3.1]non-3-yl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

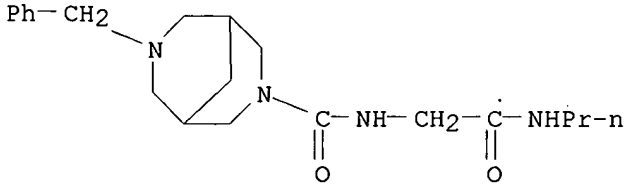


RN 313476-91-4 CAPLUS

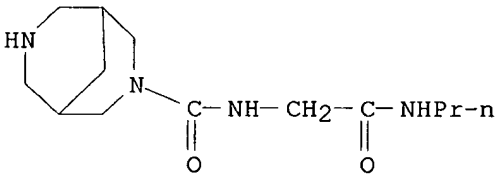
CN Glycine, N-[[7-(phenylmethyl)-3,7-diazabicyclo[3.3.1]non-3-yl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)



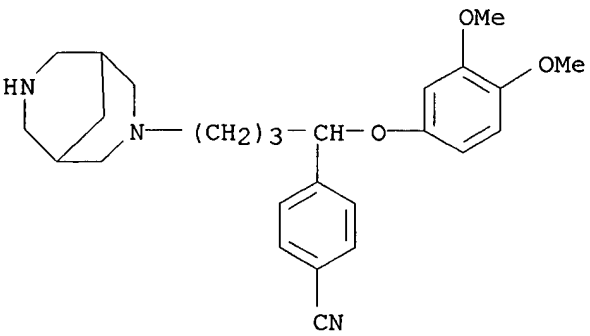
RN 313476-93-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-[2-oxo-2-(propylamino)ethyl]-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



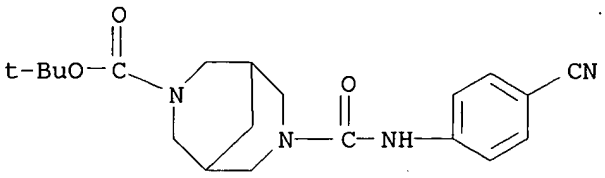
RN 313476-94-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-[2-oxo-2-(propylamino)ethyl]- (9CI) (CA INDEX NAME)



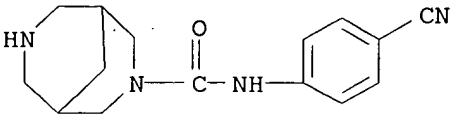
RN 313477-00-8 CAPLUS
CN Benzonitrile, 4-[4-(3,7-diazabicyclo[3.3.1]non-3-yl)-1-(3,4-dimethoxyphenoxy)butyl]- (9CI) (CA INDEX NAME)



RN 313477-03-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[[(4-cyanophenyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 313477-05-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)



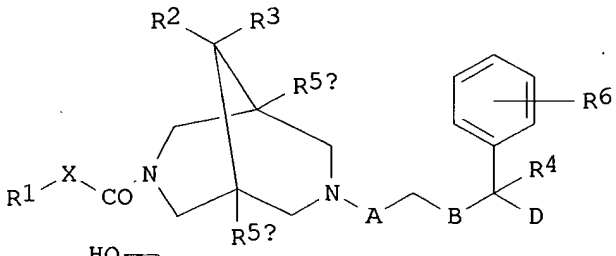
RE.CNT 5
RE
(1) Astra Aktiebolag; WO 9931100 A1 1999 CAPLUS
(2) Basf Aktiengesellschaft; EP 0308843 A2 1989 CAPLUS
(3) Kali-Chemie Pharma Gmbh; EP 0306871 A2 1989 CAPLUS
(4) Kenneth, D; US 5786481 A 1998 CAPLUS
(5) The Board Of Regents Of Oklahoma State University; WO 9107405 A1 1991 CAPLUS

L13 ANSWER 3 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:900636 CAPLUS
DN 134:42151
TI Preparation of new bispidines useful in the treatment of cardiac arrhythmias
IN Bjore, Annika; Bjorsne, Magnus; Halvarsson, Torbjorn; Hoffmann, Kurt-jurgen; Samuelsson, Bertil; Strandlund, Gert
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000076999	A1	20001221	WO 2000-SE1253	20000615

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI SE 1999-2270 A 19990616
OS MARPAT 134:42151
GI



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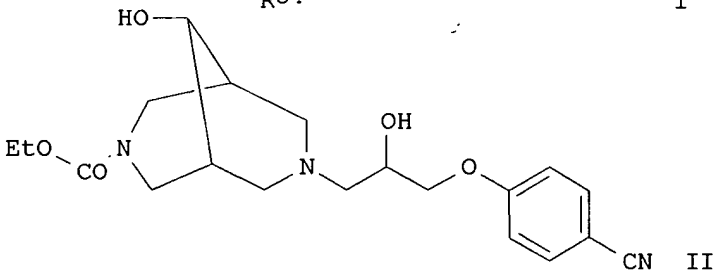


II

AB Bispidines, such as I [R1 = alkyl, arylalkyl, etc.; R2, R3 = H, OH, alkyl, etc.; R2R3 = O; R4, R5a, R5b = H, alkyl; R6 = OH, CN, NO2, NH2, halogen, etc.; X = O, S; A, B = bond, linking group, such as alkylene, etc.; D = H, OH, alkyl, aminoalkyl, etc.], were prepd. for pharmaceutical use in the treatment of cardiac arrhythmias, in particular atrial and ventricular

arrhythmias. Thus, bispidine II was prepd. in multistep synthetic sequence starting from Et 4-oxo-1-piperidinecarboxylate, epichlorohydrin, and 4-cyanophenol. The prepd. bispidines were tested for primary electrophysiol. effects in anesthetized guinea pigs.

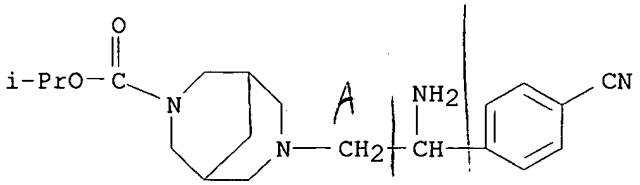
IT **313238-19-6P**

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)

RN 313238-19-6 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-amino-2-(4-cyanophenyl)ethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



Proviso cl. 27 R7 does not rep. opt. phenyl

IT **313238-07-2P 313238-09-4P 313238-13-0P**
313238-15-2P 313238-17-4P 313238-21-0P
313238-23-2P 313238-25-4P 313238-26-5P
313238-28-7P 313238-30-1P 313269-42-0P
313269-43-1P 313269-44-2P 313269-45-3P

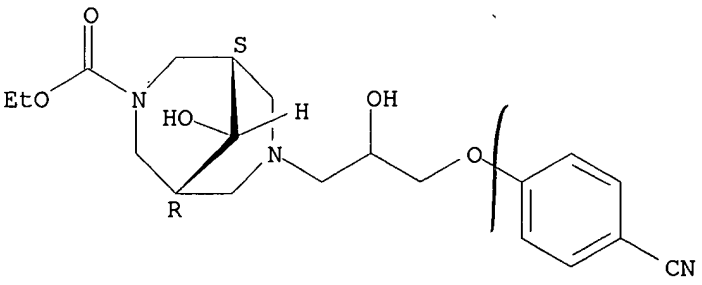
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)

RN 313238-07-2 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9-hydroxy-, ethyl ester, (9-syn)- (9CI) (CA INDEX NAME)

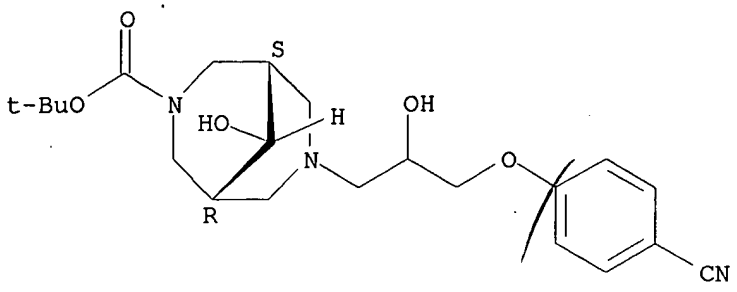
Relative stereochemistry.



RN 313238-09-4 CAPLUS

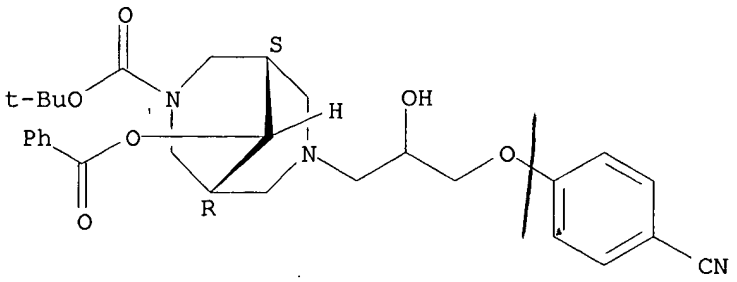
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9-hydroxy-, 1,1-dimethylethyl ester, (9-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

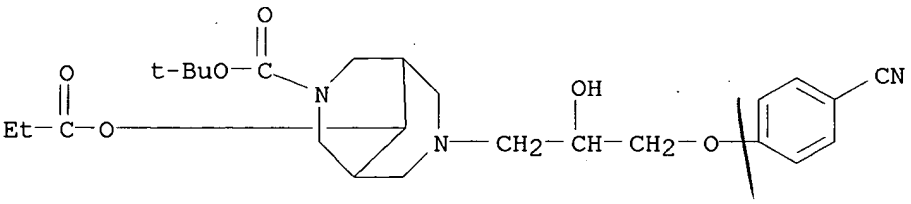


RN 313238-13-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-(benzoyloxy)-7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester, (9-syn)- (9CI) (CA INDEX NAME)

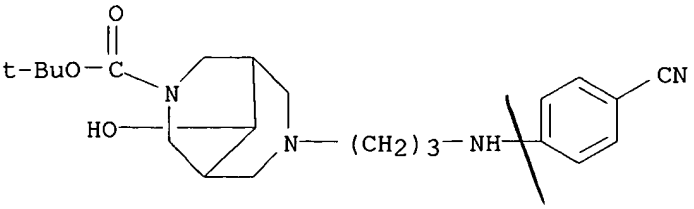
Relative stereochemistry.



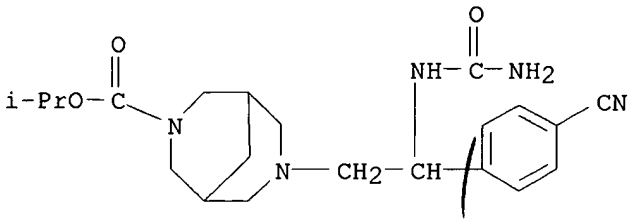
RN 313238-15-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9-(1-oxopropoxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



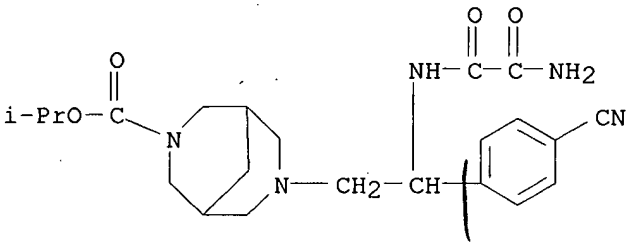
RN 313238-17-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[(4-cyanophenyl)amino]propyl]-9-hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



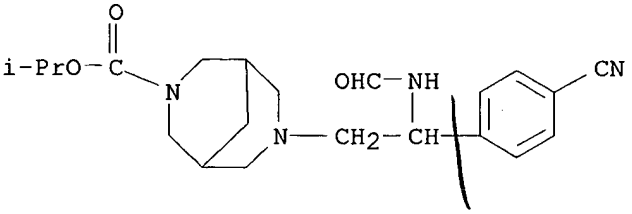
RN 313238-21-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-[(aminocarbonyl)amino]-2-(4-cyanophenyl)ethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



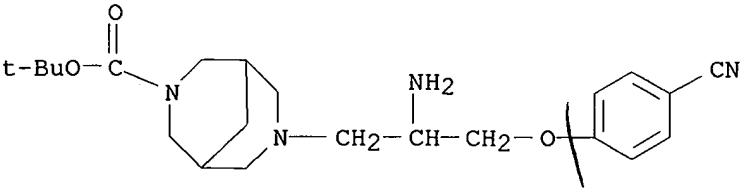
RN 313238-23-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-[(aminooxoacetyl)amino]-2-(4-cyanophenyl)ethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



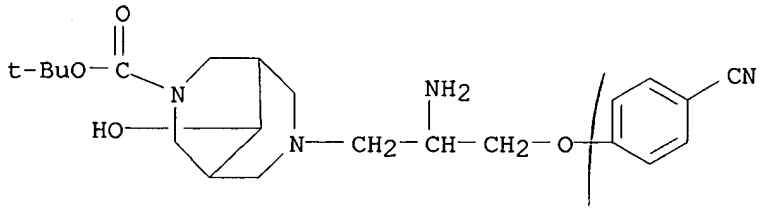
RN 313238-25-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-(4-cyanophenyl)-2-(formylamino)ethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



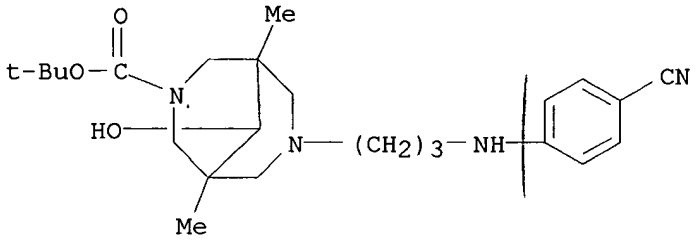
RN 313238-26-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-amino-3-(4-cyanophenoxy)propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 313238-28-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-amino-3-(4-cyanophenoxy)propyl]-9-hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

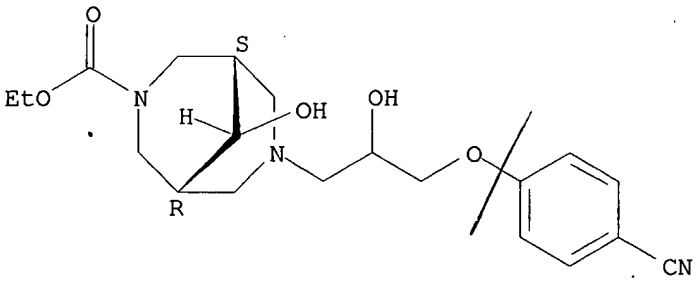


RN 313238-30-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[(4-cyanophenyl)amino]propyl]-9-hydroxy-1,5-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



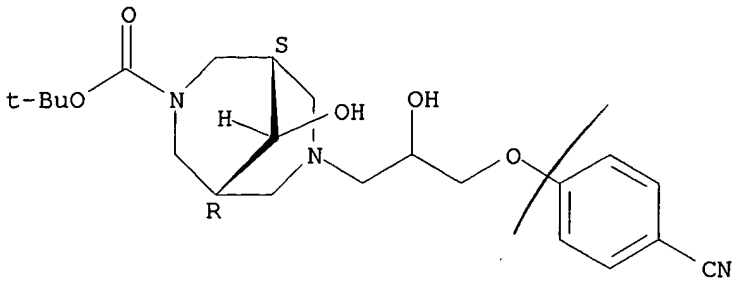
RN 313269-42-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9-hydroxy-, ethyl ester, (9-anti)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



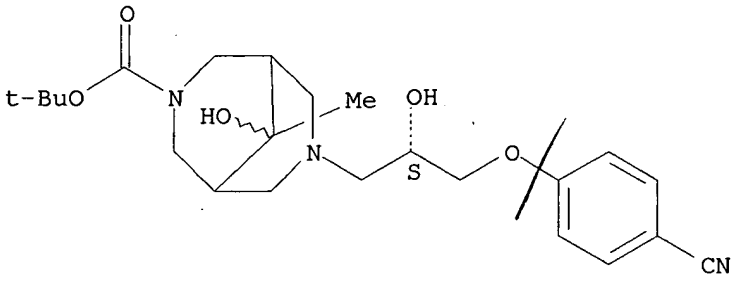
RN 313269-43-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9-hydroxy-, 1,1-dimethylethyl ester, (9-anti)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



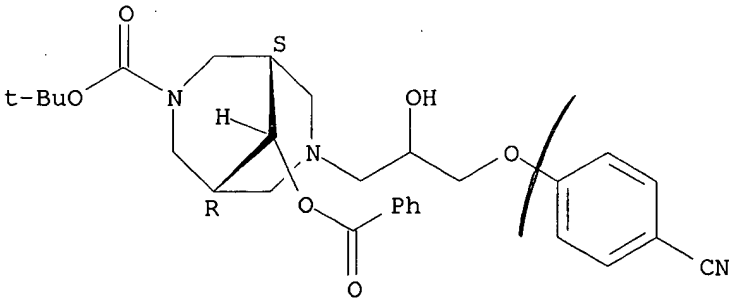
RN 313269-44-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-9-hydroxy-9-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 313269-45-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-(benzoyloxy)-7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester, (9-anti)- (9CI) (CA INDEX NAME)

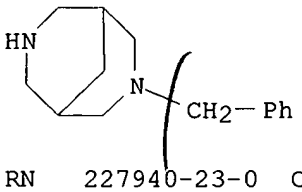
Relative stereochemistry.



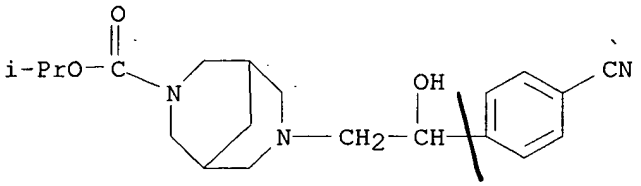
IT **69407-32-5P 227940-23-0P 227940-70-7P 227940-71-8P 227940-72-9P 227940-74-1P 227940-75-2P 227940-78-5P 313238-37-8P 313238-39-0P 313238-42-5P 313238-44-7P 313238-46-9P 313238-48-1P 313238-51-6P 313238-53-8P 313238-63-0P 313238-65-2P**

313238-75-4P 313238-77-6P 313238-79-8P
313238-81-2P 313238-83-4P 313269-46-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)

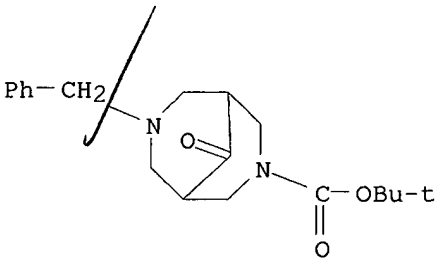
RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



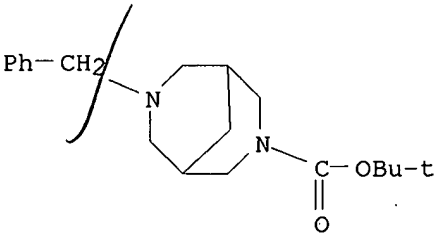
RN 227940-23-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-(4-cyanophenyl)-2-hydroxyethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 227940-70-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-oxo-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

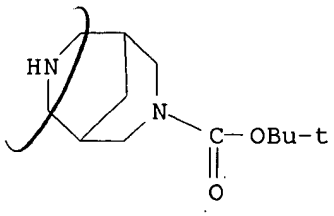


RN 227940-71-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

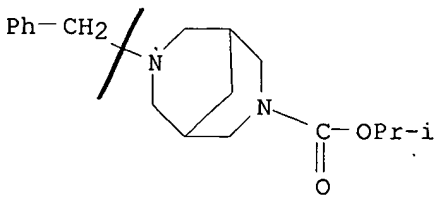


RN 227940-72-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1,1-dimethylethyl ester

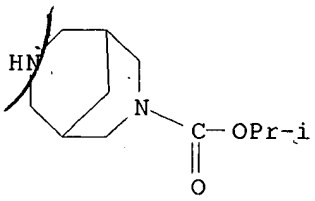
(9CI) (CA INDEX NAME)



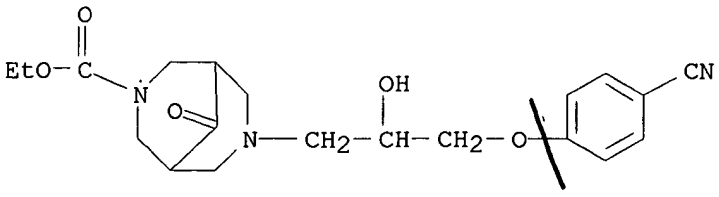
RN 227940-74-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1-methylethyl ester (9CI) (CA INDEX NAME)



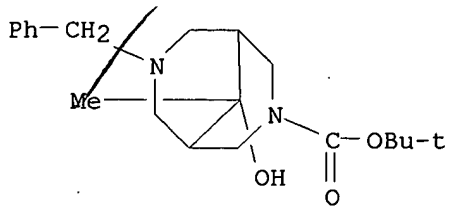
RN 227940-75-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1-methylethyl ester (9CI) (CA INDEX NAME)



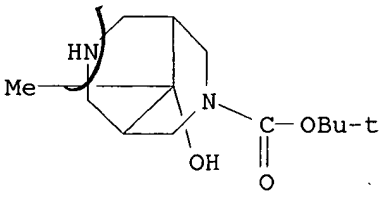
RN 227940-78-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9-oxo-, ethyl ester (9CI) (CA INDEX NAME)



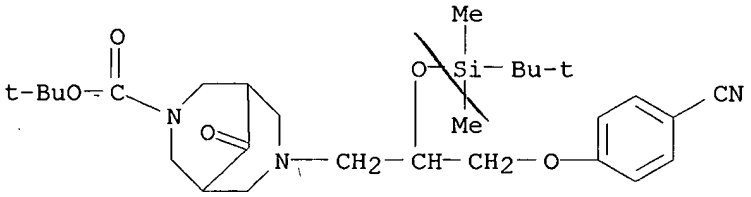
RN 313238-37-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-hydroxy-9-methyl-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



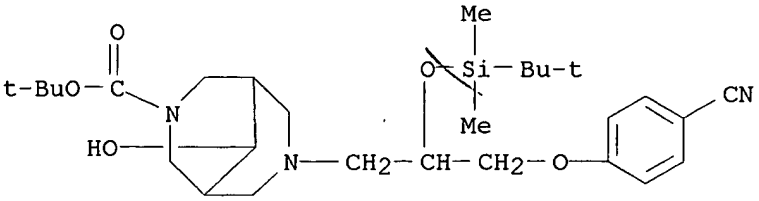
RN 313238-39-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-hydroxy-9-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 313238-42-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]-9-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

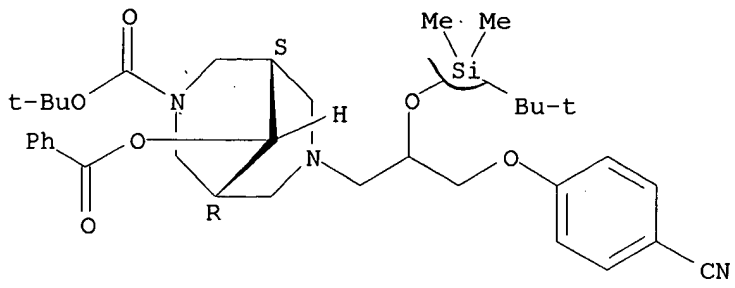


RN 313238-44-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]-9-hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

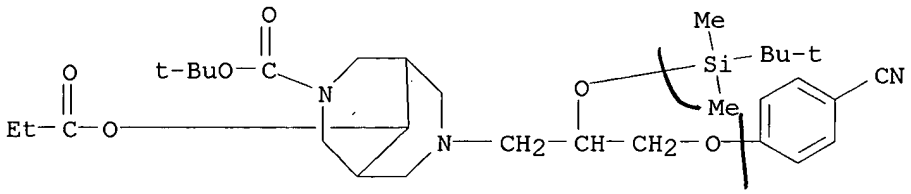


RN 313238-46-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-(benzoyloxy)-7-[3-(4-cyanophenoxy)-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]-, 1,1-dimethylethyl ester, (9-syn)- (9CI) (CA INDEX NAME)

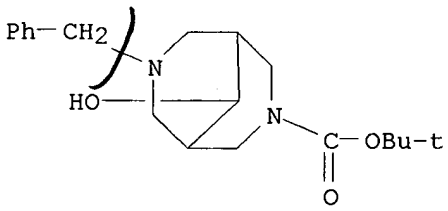
Relative stereochemistry.



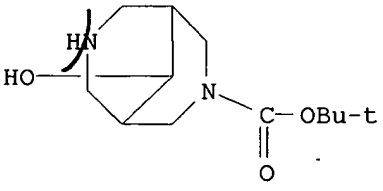
RN 313238-48-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]-9-(1-oxopropoxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 313238-51-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-hydroxy-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

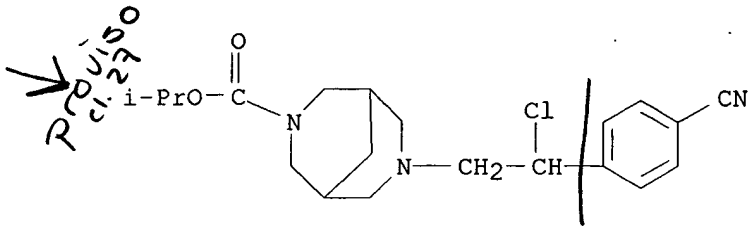


RN 313238-53-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

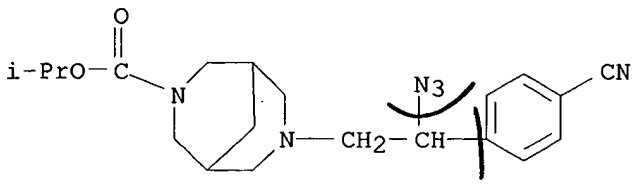


RN 313238-63-0 CAPLUS

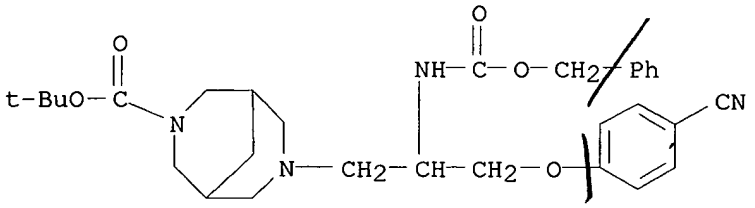
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-chloro-2-(4-cyanophenyl)ethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



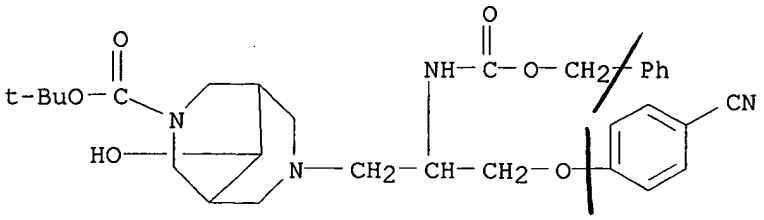
RN 313238-65-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-azido-2-(4-cyanophenyl)ethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



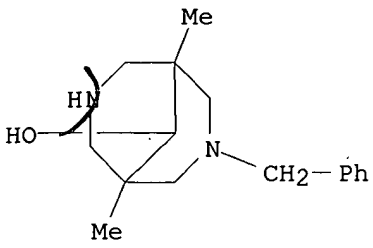
RN 313238-75-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-[[(phenylmethoxy)carbonyl]amino]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 313238-77-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-[[(phenylmethoxy)carbonyl]amino]propyl]-9-hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

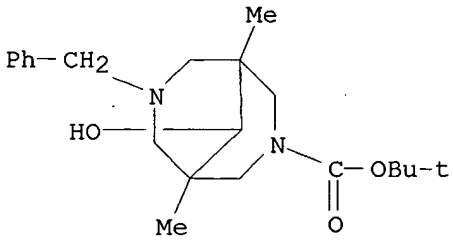


RN 313238-79-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 1,5-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

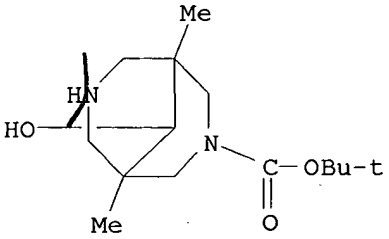


RN 313238-81-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-hydroxy-1,5-dimethyl-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Proviso

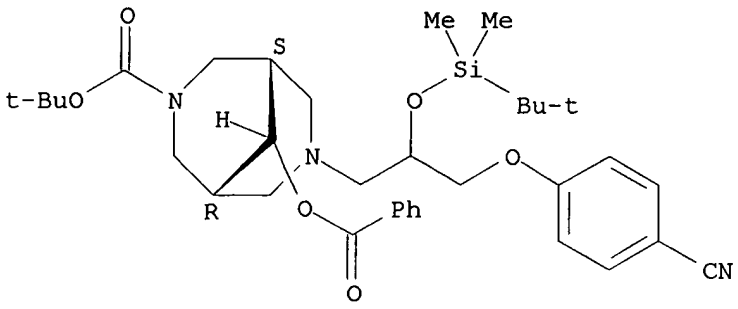


RN 313238-83-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-hydroxy-1,5-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 313269-46-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-(benzoyloxy)-7-[3-(4-cyanophenoxy)-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]-, 1,1-dimethylethyl ester, (9-anti)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



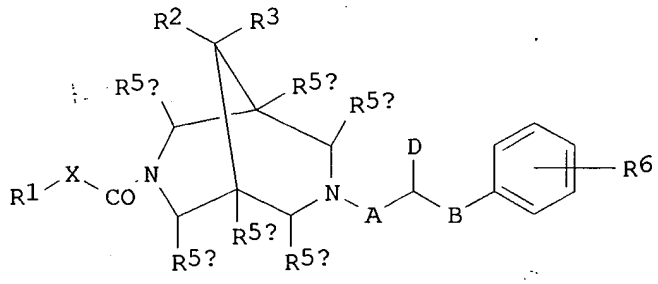
RE.CNT 5
RE
(1) Astra Aktiebolag; WO 9931100 A1 1999 CAPLUS
(2) Basf Aktiengesellschaft; EP 0308843 A2 1989 CAPLUS
(3) Kali-Chemie Pharma Gmbh; EP 0306871 A2 1989 CAPLUS
(4) Kenneth, D; US 5786481 A 1998 CAPLUS
(5) The Board Of Regents Of Oklahoma State University; WO 9107405 A1 1991 CAPLUS

L13 ANSWER 4 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:900635 CAPLUS
DN 134:42150
TI Preparation of new bispidines useful in the treatment of cardiac arrhythmias
IN Bjorsne, Magnus; Frantsi, Marianne; Hoffmann, Kurt-Jurgen; Ohlsson, Bengt
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000076998	A1	20001221	WO 2000-SE1252	20000615

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI SE 1999-2269 A 19990616
OS MARPAT 134:42150
GI



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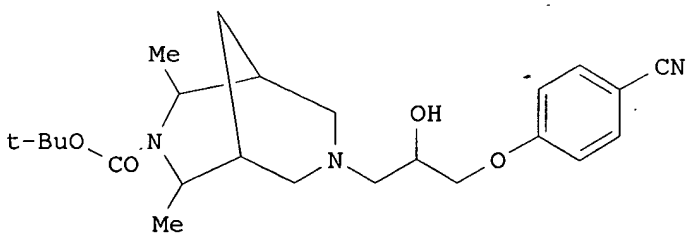


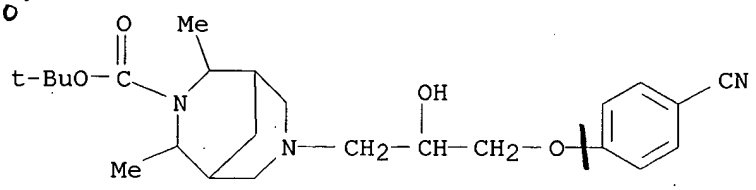
II

AB Bispidines, such as I [R1 = alkyl, arylalkyl, etc.; R2, R3, R5a, R5b, R5c, R5d, R5e, R5f = H, alkyl; R6 = OH, CN, NO2, NH2, halogen, etc.; R9 = alkyl, aryl, acyl, etc.; X = O, S; A, B = bond, linking group, such as alkylene, etc.; D = OH, alkyl, etc.], were prepd. for pharmaceutical use in the treatment of cardiac arrhythmias, in particular atrial and

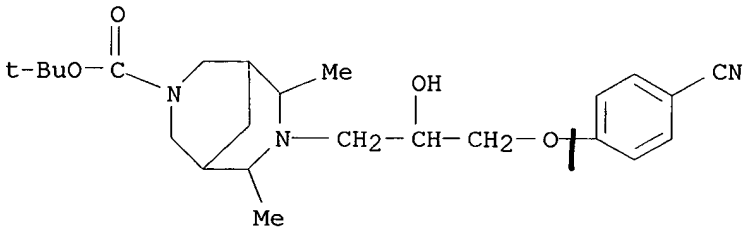
ventricular arrhythmias. Thus, bispidine II was prepd. in multistep synthetic sequence starting from N,N'-dibenzylbispidine, 4-cyanophenol, and epichlorohydrin. The prepd. bispidines were tested for primary electrophysiol. effects in anesthetized guinea pigs.

IT **312961-89-0P 312961-90-3P 312961-91-4P 313056-94-9P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)

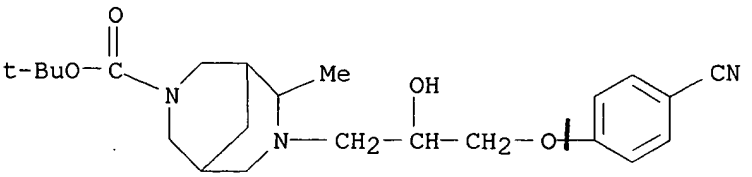
RN 312961-89-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-2,4-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 312961-90-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-6,8-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

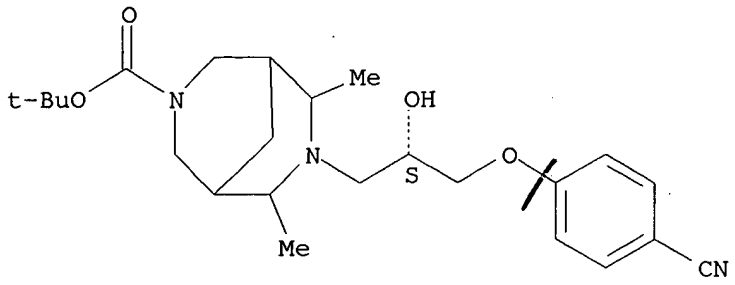


RN 312961-91-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-6-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

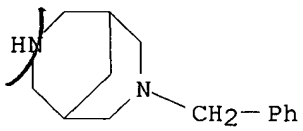


RN 313056-94-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-6,8-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

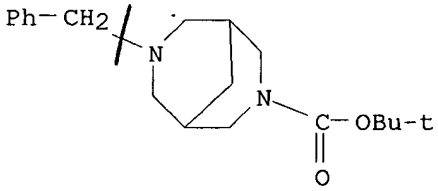
Absolute stereochemistry.



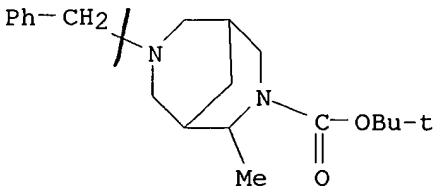
IT **69407-32-5P 227940-71-8P 312961-92-5P**
312961-93-6P 312961-95-8P 312961-96-9P
312961-98-1P 312961-99-2P 313056-95-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of new bispidines useful in the treatment of cardiac arrhythmias)
RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



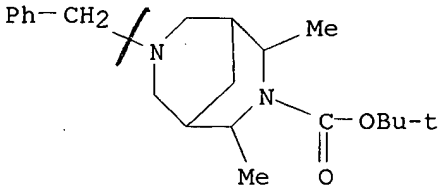
RN 227940-71-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



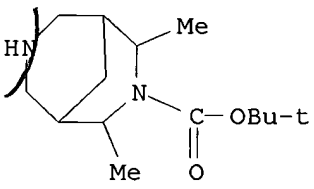
RN 312961-92-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 2-methyl-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



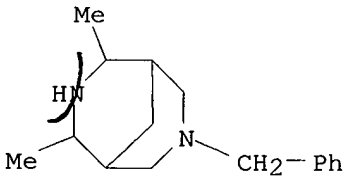
RN 312961-93-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 2,4-dimethyl-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



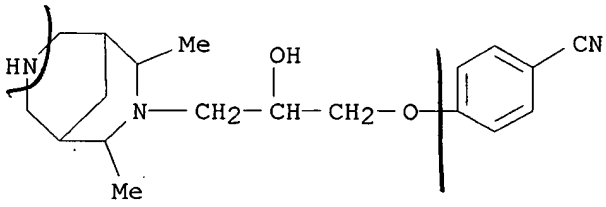
RN 312961-95-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 2,4-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



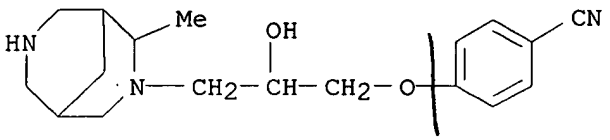
RN 312961-96-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4-dimethyl-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 312961-98-1 CAPLUS
CN Benzonitrile, 4-[3-(2,4-dimethyl-3,7-diazabicyclo[3.3.1]non-3-yl)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)

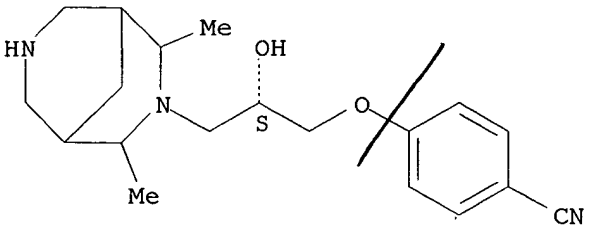


RN 312961-99-2 CAPLUS
CN Benzonitrile, 4-[2-hydroxy-3-(2-methyl-3,7-diazabicyclo[3.3.1]non-3-yl)propoxy]- (9CI) (CA INDEX NAME)



RN 313056-95-0 CAPLUS
CN Benzonitrile, 4-[(2S)-3-(2,4-dimethyl-3,7-diazabicyclo[3.3.1]non-3-yl)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 5
RE
(1) Astra Aktiebolag; WO 9931100 A1 1999 CAPLUS
(2) Basf Akatiengesellschaft; EP 0308843 A2 1989 CAPLUS
(3) Kali-Chemie Pharma Gmbh; EP 0306871 A2 1989 CAPLUS
(4) Kenneth, D; US 5786481 A 1998 CAPLUS
(5) The Board Of Regents Of Oklahoma State University; WO 9107405 A1 1991 CAPLUS

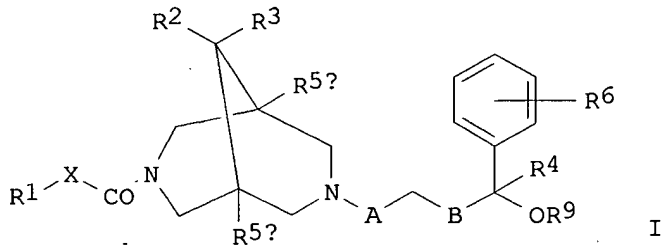
L13 ANSWER 5 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:900634 CAPLUS
DN 134:42149
TI Preparation of new bispidines useful in the treatment of cardiac arrhythmias
IN Frantsi, Marianne; Hoffmann, Kurt-Jurgen; Strandlund, Gert
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000076997	A1	20001221	WO 2000-SE1251	20000615

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI SE 1999-2271 A 19990616
OS CASREACT 134:42149; MARPAT 134:42149
GI



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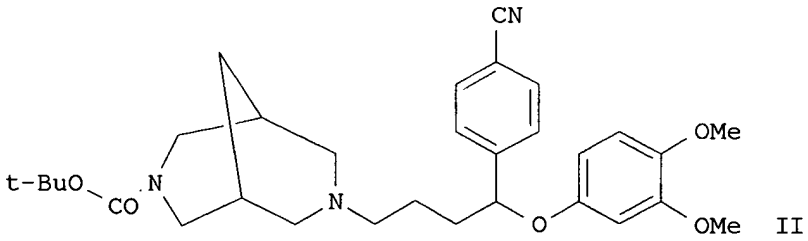


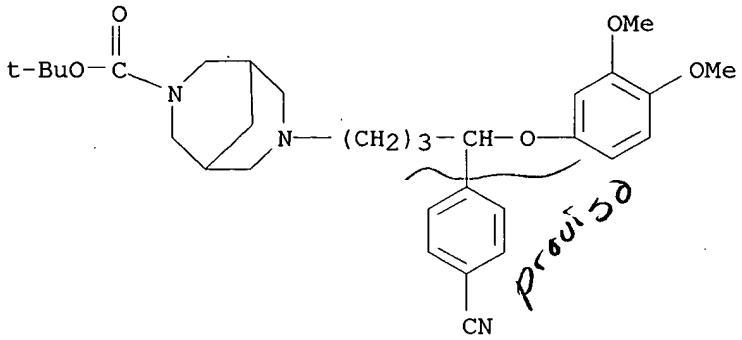
II

AB Bispidines, such as I [R1 = alkyl, arylalkyl, etc.; R2, R3, R4, R5a, R5b = H, alkyl; R6 = OH, CN, NO2, NH2, halogen, etc.; R9 = alkyl, aryl, acyl, etc.; X = O, S; A, B = bond, linking group, such as alkylene, etc.], were prepd. for pharmaceutical use in the treatment of cardiac arrhythmias, in particular atrial and ventricular arrhythmias. Thus, bispidine II was prepd. in multistep synthetic sequence starting from N,N'-

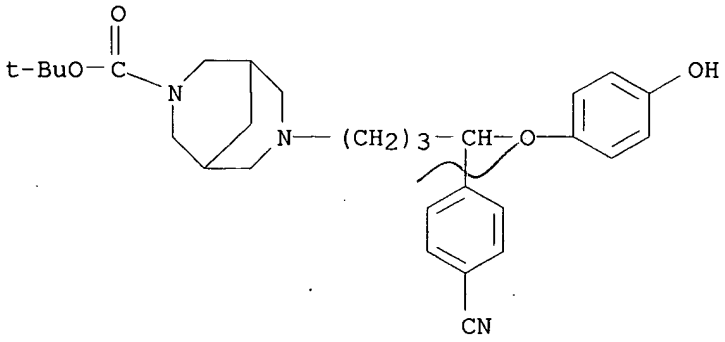
dibenzylbispidine, 4-(1-hydroxy-3-butenyl)benzonitrile, and 3,4-dimethoxyphenol. The prepd. bispidines were tested for primary electrophysiol. effects in anesthetized guinea pigs.

IT **312955-28-5P 312955-29-6P 312955-30-9P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of bispidines useful in the treatment of cardiac arrhythmias)

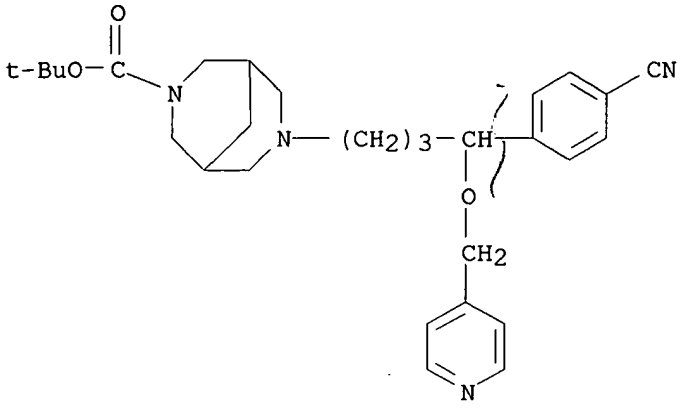
RN 312955-28-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-(3,4-dimethoxyphenoxy)butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



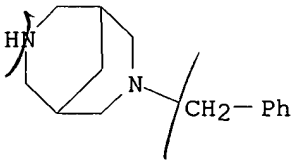
RN 312955-29-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-(4-hydroxyphenoxy)butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



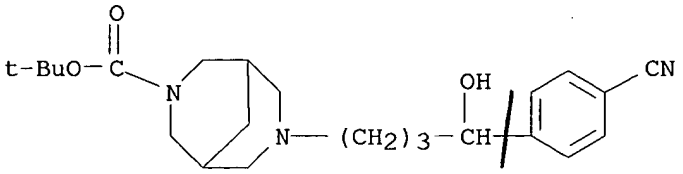
RN 312955-30-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-(4-pyridinylmethoxy)butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



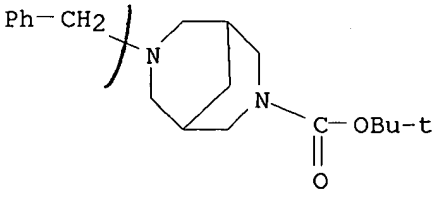
IT **69407-32-5P 227940-28-5P 227940-71-8P**
227940-72-9P 227940-94-5P 312955-35-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of bispidines useful in the treatment of cardiac arrhythmias)
RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



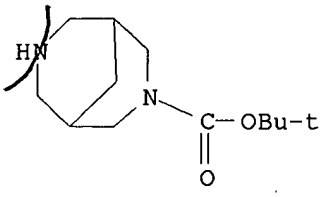
RN 227940-28-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-hydroxybutyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



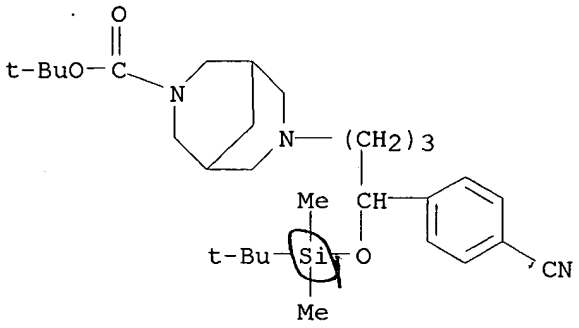
RN 227940-71-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



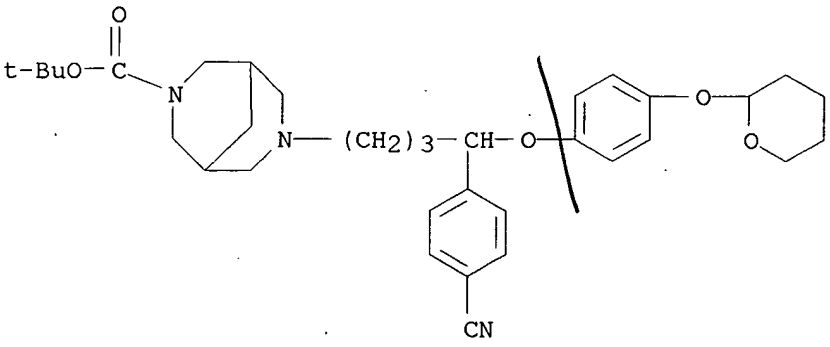
RN 227940-72-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 227940-94-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



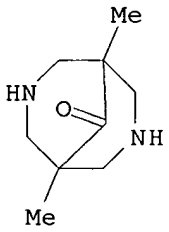
RN 312955-35-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-[4-[(tetrahydro-2H-pyran-2-yl)oxy]phenoxy]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RE.CNT 5
RE
(1) Astra Aktiebolag; WO 9931100 A1 1999 CAPLUS
(2) Basf Aktiengesellschaft; EP 0308843 A2 1989 CAPLUS
(3) Kali-Chemie Pharma Gmbh; EP 0306871 A2 1989 CAPLUS
(4) Kenneth, D; US 5786481 A 1998 CAPLUS

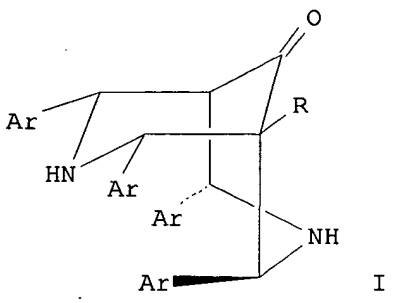
(5) The Board Of Regents Of Oklahoma State University; WO 9107405 A1 1991 CAPLUS

L13 ANSWER 6 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:780169 CAPLUS
DN 134:85911
TI 1H NMR spectral study of some 4-hydroxy-2,6-diphenylpiperidines and a systematic analysis of 1H chemical shifts in some piperidines and 3,7-diazabicyclo[3.3.1]nonane derivatives
AU Pandiarajan, K.; Manimekalai, A.; Rajarajan, G.
CS Department of Chemistry, Annamalai University, Annamalai Nagar, 608 002, India
SO Indian J. Chem., Sect. B: Org. Chem. Incl. Med. Chem. (2000), 39B(7), 517-524
CODEN: IJSBDB; ISSN: 0376-4699
PB National Institute of Science Communication, CSIR
DT Journal
LA English
AB 1H NMR spectra have been recorded for some 3,5-dimethyl-2,6-diphenyl-4-piperidinol derivs. and their corresponding axial 4-hydroxy epimers. The proton chem. shifts and coupling consts. have been detd. by anal. of the spectra. The vicinal coupling consts. suggest that a boat form may make a slight contribution to the equatorial alcs. The .DELTA..delta.ea value for the protons in 5-position is less in the axial alc. than in the corresponding equatorial alc. and becomes neg. in one case. The effects of Me, Et, iso-Pr and hydroxyl groups on the chem. shifts of the ring protons are discussed. Anal. of the chem. shifts of some 9-hydroxy-3,7-diazabicyclo[3.3.1]nonanes suggests that the 3,7-di-Ph substituted compds. exist in a boat-chair conformation.
IT **80808-96-4**
RL: PRP (Properties)
(proton NMR study of some piperidinols and diazabicyclononane derivs.)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)



RE.CNT 34
RE
(1) Arumugam, N; Magn Reson Chem 1987, V25, P869 CAPLUS
(2) Balasubramanian, M; Tetrahedron 1963, V19, P2135 CAPLUS
(3) Balasubramanian, M; Tetrahedron Lett 1960, P23 CAPLUS
(4) Baliah, V; Chem Rev 1983, V83, P379 CAPLUS
(7) Bhavani, N; Magn Reson Chem 1996, V34, P582 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:757308 CAPLUS
DN 134:42298
TI NMR study of the stereochemistry of 2,4,6,8-tetraaryl-3,7-diazabicyclo[3.3.1]nonan-9-ones
AU Vijayakumar, V.; Sundaravadivelu, M.; Perumal, S.; Hewlins, M. J. E.
CS Department of Chemistry, Gandhigram Rural Institute (Deemed University), Gandhigram, 624 302, India
SO Magn. Reson. Chem. (2000), 38(10), 883-885
CODEN: MRCHEG; ISSN: 0749-1581
PB John Wiley & Sons Ltd.
DT Journal
LA English
GI



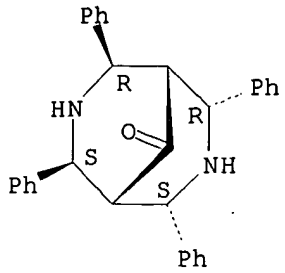
I

AB The 1H and 13C NMR spectra of 2,4,6,8-tetraaryl-3,7-diazabicyclo[3.3.1]nonan-9-ones [I; Ar = Ph, R = H (II); Ar = p-CH3C6H4, R = H (III); Ar = p-CH3OC6H4, R = H (IV); Ar = Ph, R = CH3 (V)] were measured at 360 and 90 MHz, resp. The chem. shifts for II-V were assigned unambiguously using one- and two-dimensional NMR spectroscopic data and nuclear Overhauser enhancement studies. These results clearly indicate a chair-boat conformation for these compds. with (i) all aryl groups orientated equatorially and (ii) the aryl groups of the boat lying in the shielding zone of the aryl groups of the chair. Literature assignments of carbon chem. shifts were also revised.

IT **65732-77-6 75549-52-9 142698-37-1 312583-40-7**
RL: PRP (Properties)
(NMR study of the stereochem. of tetraaryl-diazabicyclononanones)

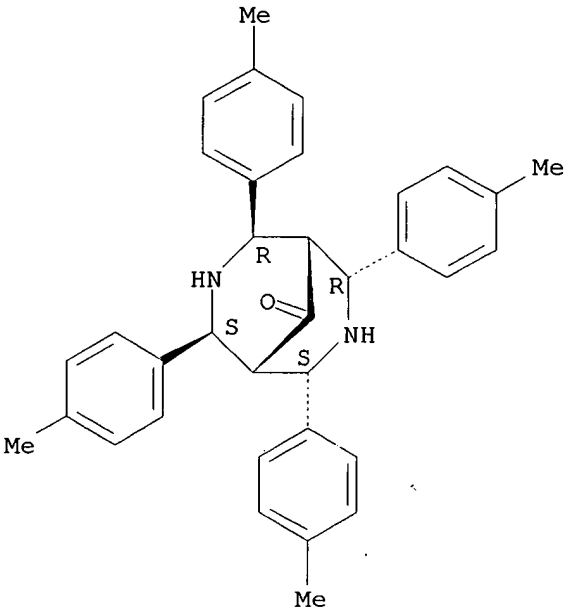
RN 65732-77-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



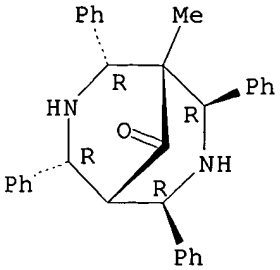
RN 75549-52-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



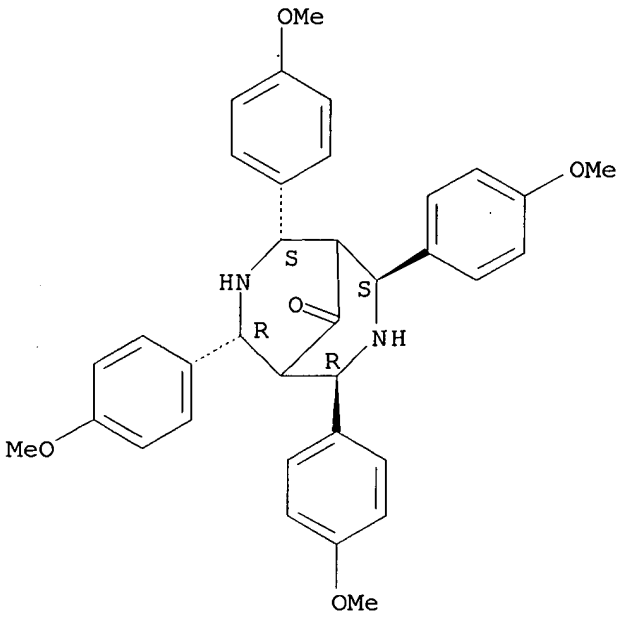
RN 142698-37-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl-, (2R,4R,6R,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 312583-40-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methoxyphenyl)-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 12
RE
(1) Azerbaev, I; Vestn Akad Kaz SSR 1975, V47 CAPLUS
(2) Baliah, V; Indian J Chem, Sect B 1977, V15, P684 CAPLUS
(3) Binning, F; DE 2726571 1978 CAPLUS
(4) Chiavarelli, S; Ann 1st Supersanita 1972, V8, P156 CAPLUS
(5) Hart, N; Aust J Chem 1967, V20, P561 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

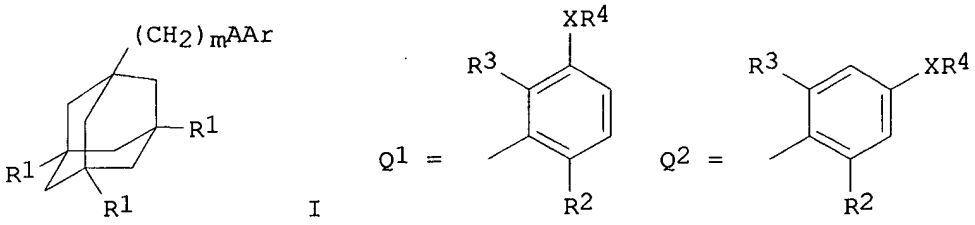
L13 ANSWER 8 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:742083 CAPLUS
DN 133:309908
TI Preparation of piperazinyladamantylmethylbenzamides and related compounds as P2X7 receptor antagonists.
IN Alcaraz, Lilian; Furber, Mark; Mortimore, Michael
PA AstraZeneca AB, Swed.
SO PCT Int. Appl., 166 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000061569	A1	20001019	WO 2000-SE663	20000406

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI SE 1999-1270 A 19990409
GB 2000-2330 A 20000201
OS MARPAT 133:309908
GI

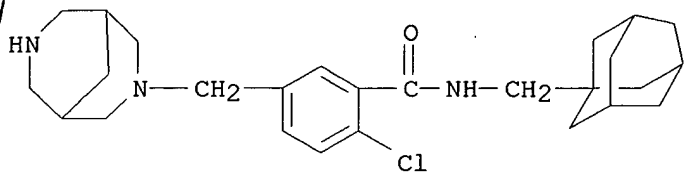


AB Title compds. I [m = 1-3; R1 = H, halo; A = CONH; Ar = Q1, Q2; X = O, CO, (CH2)1-6, S, SO, SO2, etc.; 1 of R2, R3 = halo, cyano, NO2, amino, OH, (substituted) alkyl, cycloalkyl, alkoxy, etc., the other = H, halo; R4 = 3-9 membered (unsatd.) (substituted) heterocyclyl contg. 1-2 N atoms, substituted 3-8 membered carbocyclyl], were prepd. Thus, 3-chloro-2-nitro-N-[tricyclo[3.3.1.13,7]dec-1-ylmethyl]benzamide (prepn. given) and tert-Bu piperazine-1-carboxylate were heated at 120.degree. in Me2SO for 24 h to give the coupling product, which was stirred with HCl in THF/dioxane to give 2-nitro-3-piperazin-1-yl-N-[tricyclo[3.3.1.13,7]dec-1-ylmethyl]benzamide. I antagonized P2X7 receptors with pIC50 >4.50.

IT **301672-21-9P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of piperazinyladamantylmethylbenzamides and related compds. as P2X7 receptor antagonists)

RN 301672-21-9 CAPLUS

CN Benzamide, 2-chloro-5-(3,7-diazabicyclo[3.3.1]non-3-ylmethyl)-N-(tricyclo[3.3.1.13,7]dec-1-ylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

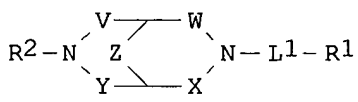
RE.CNT 4
RE
(1) Astra Pharmaceuticals Ltd; WO 9929660 A1 1999 CAPLUS
(2) Astra Pharmaceuticals Ltd; WO 9929661 A1 1999 CAPLUS
(3) Bernstein; US 3789072 A 1974 CAPLUS
(4) Kyowa Hakko Kogyo Co Ltd; EP 0395093 A1 1990 CAPLUS

L13 ANSWER 9 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:535147 CAPLUS
DN 133:135332
TI Preparation of diazabicyclic derivatives as nicotinic acetylcholine receptor ligands
IN Bunnelle, William H.; Cristina, Daniela Barlocco; Daanen, Jerome F.; Dart, Michael J.; Meyer, Michael D.; Ryther, Keith B.; Schrimpf, Michael R.; Sippy, Kevin B.; Toupence, Richard B.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 123 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

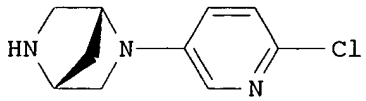
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000044755	A1	20000803	WO 2000-US1620	20000125

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-239838 A 19990129
OS MARPAT 133:135332
GI



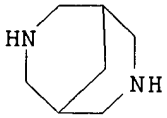
I



II

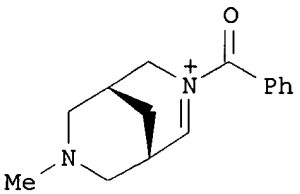
AB The title compds. (I) [wherein V and X = independently a bond or CH2; W and Y = independently a bond, CH2, or CH2CH2; Z = CH2, CH2CH2, or CH2CH2CH2; L1 = a bond or (CH2)n; n = 1-5; R1 = certain heteroarom. rings, such as pyridinyl, pyrimidinyl, pyrazinyl, quinolinyl, etc.; R2 = H, alkoxycarbonyl, (amino)alkyl, aminocarbonylalkyl, benzyloxycarbonyl, cyanoalkyl, dihydro-3-pyridinylcarbonyl, hydroxy(alkyl), phenoxycarbonyl, or NH2] and their pharmaceutically acceptable salts were prepd. as cholinergic modulators for the treatment of pain and other conditions. For example, (-)-II.bul.Ts-OH was prepd. in a multi-step sequence involving N-protection of (1R,4R)-2-benzyl-2,5-diazabicyclo[2.2.1]heptane.bul.2HBr with CO(OBu-t)2 (94%), debenzylation (93%), addn. of 2-chloro-5-iodopyridine (67%), and deprotection followed by salt formation (71%). (-)-II.bul.Ts-OH exhibited high affinity for the nicotinic acetylcholine receptor with Ki of 0.01 nM and showed a significant antinociceptive effect at the minimally ED of 0.62 .mu.mol/kg in the mouse hot plate paradigm.
IT **280-74-0**, 3,7-Diazabicyclo[3.3.1]nonane
RL: RCT (Reactant)
(prepn. of N-substituted diazabicycloalkanes as nicotinic acetylcholine receptor ligands by addn. of haloheterocycles to protected

diazabicyloalkanes followed by deprotection and optional substitution)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)

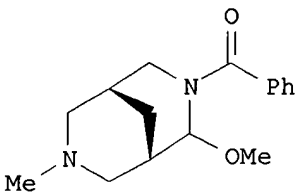


RE.CNT 4
RE
(1) Daniela, B; JOURNAL OF MEDICINAL CHEMISTRY 1998, V41(5), P674
(2) Eugene, T; US 5478939 A 1995 CAPLUS
(3) Neurosearch AS; WO 9854181 A 1998 CAPLUS
(4) Neurosearch AS; WO 9854182 A 1998 CAPLUS

L13 ANSWER 10 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:528840 CAPLUS
DN 133:281938
TI Bispidine-derived N-acyliminium ions in synthesis: stereocontrolled construction of the BCD rings of sparteine
AU Harrison, J. R.; O'Brien, P.
CS Department of Chemistry, University of York, Heslington, York, YO10 5DD, UK
SO Tetrahedron Lett. (2000), 41(32), 6167-6170
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 133:281938
GI



I



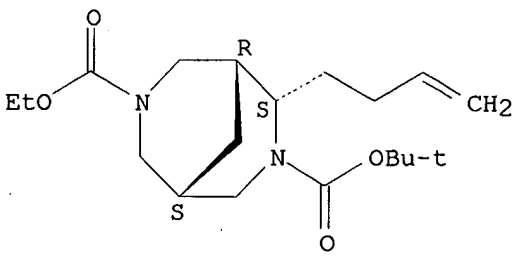
II

AB Reaction of Grignard reagents with bispidine-derived N-acyliminium ions I (generated in situ from an .alpha.-methoxy bispidine amide II) has been studied as a new route to sparteine analogs. The addn. reactions proceed with complete diastereoselectivity to generate products with the same relative stereochem. as in the BCD rings of sparteine. Stereocontrolled synthesis of a tricyclic diamine structurally equiv. to the BCD rings of sparteine, is described.

IT **300543-06-0P 300543-07-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(bispidine-derived N-acyliminium ions in stereocontrolled construction of the BCD rings of sparteine synthesis)

RN 300543-06-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 2-(3-butenyl)-, 3-(1,1-dimethylethyl) 7-ethyl ester, (1R,2S,5S)-rel- (9CI) (CA INDEX NAME)

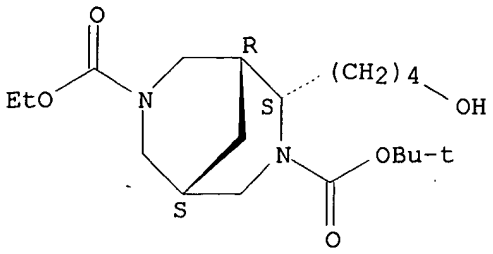
Relative stereochemistry.



RN 300543-07-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 2-(4-hydroxybutyl)-,

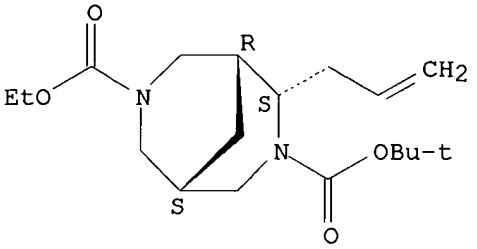
3-(1,1-dimethylethyl) 7-ethyl ester, (1R,2S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **300543-05-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(bispidine-derived N-acyliminium ions in stereocontrolled construction of the BCD rings of sparteine synthesis)
RN 300543-05-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 2-(2-propenyl)-, 3-(1,1-dimethylethyl) 7-ethyl ester, (1R,2S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



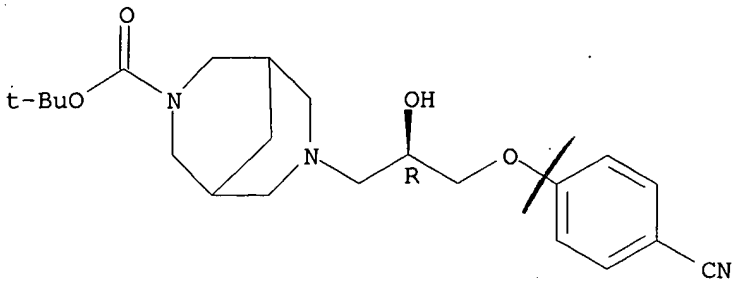
RE.CNT 24
RE
(1) Beak, P; Acc Chem Res 1996, V29, P552 CAPLUS
(2) Bohlmann, F; Chem Ber 1973, V106, P3026 CAPLUS
(3) Curtis, M; J Org Chem 1999, V64, P2996 CAPLUS
(4) Han, G; Angew Chem, Int Ed Engl 2000, V39, P237 CAPLUS
(5) Han, G; J Org Chem 1996, V61, P9483 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:260016 CAPLUS
DN 132:284247
TI A dried or frozen pharmaceutical preparation containing a class III antiarrhythmic compound
IN Bjore, Annika; Granath, Anna-Karin
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000021533	A1	20000420	WO 1999-SE1828	19991011
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	BR 9906869	A	20001017	BR 1999-6869	19991011
	EP 1043997	A1	20001018	EP 1999-970322	19991011
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2000002986	A	20000609	NO 2000-2986	20000609
PRAI	SE 1998-3517	A	19981015		
	WO 1999-SE1828	W	19991011		

OS MARPAT 132:284247
AB The present invention relates to dried prepns. contg. a class III antiarrythmic compd. in the form of cryst. or amorphous salt or any combination thereof, where the counterion is selected from pharmaceutically acceptable water-sol. org. or inorg. acids. The present invention also relates to frozen prepns. contg. a class III antiarrhythmic compd. in the form of salt soln., where the counterion is selected from pharmaceutically acceptable water-sol. org. or inorg. acids. Preferred prepns. contain a salt of the compd. 3,7-diazabicyclo[3.3.1]-nonane-3-carboxylic acid 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-1,1-dimethylethyl ester (Compd. A). Further aspects of the present invention include salts of Compd. A per se, processes for prepg. the prepn., as well as use of the prepns. for prophylaxis and/or treatment of cardiac arrhythmia.
IT **227940-01-4 263892-43-9**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(freeze-dried pharmaceuticals contg. antiarrhythmic diazabicyclononanecarboxylate deriv.)
RN 227940-01-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2R)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

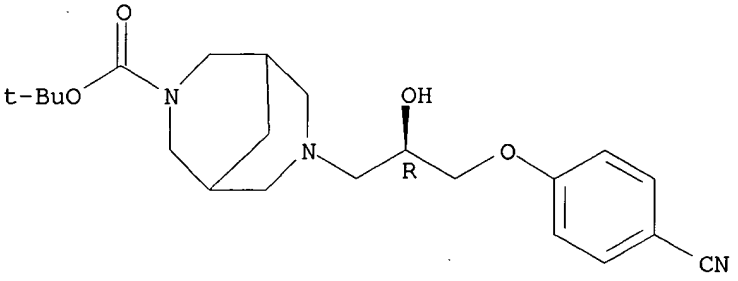


RN 263892-43-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2R)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 227940-01-4
CMF C22 H31 N3 O4

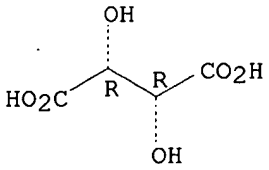
Absolute stereochemistry.



CM 2

CRN 87-69-4
CMF C4 H6 O6
CDES 1:R2:R*,R*

Absolute stereochemistry.



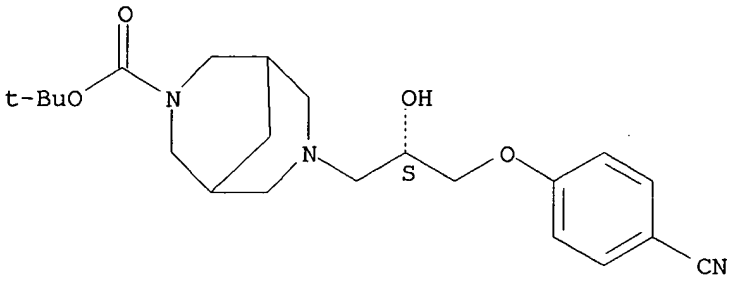
IT **227940-00-3P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of diazabicyclononanecarboxylate deriv. as antiarrhythmic agent)

RN 227940-00-3 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

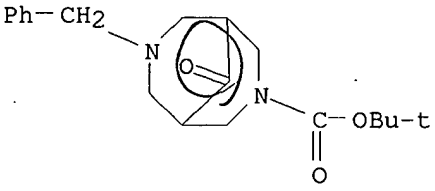


IT **227940-70-7P 227940-71-8P 227940-72-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of diazabicyclononanecarboxylate deriv. as antiarrhythmic agent)

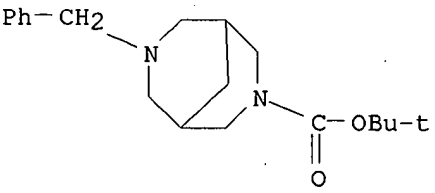
RN 227940-70-7 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-oxo-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



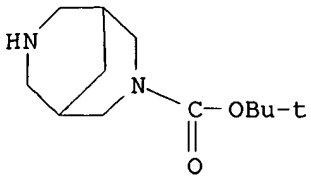
RN 227940-71-8 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 227940-72-9 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

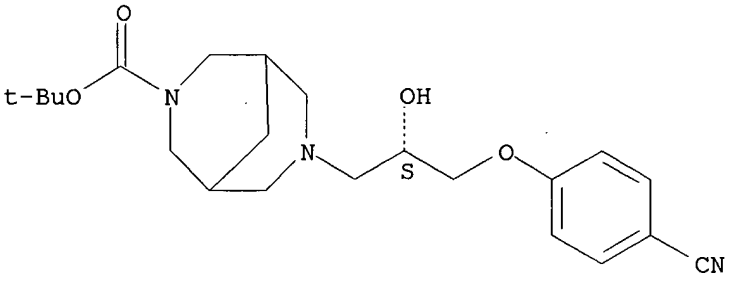


IT **263892-42-8P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of diazabicyclononanecarboxylate deriv. as antiarrhythmic agent)
RN 263892-42-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 227940-00-3
CMF C22 H31 N3 O4

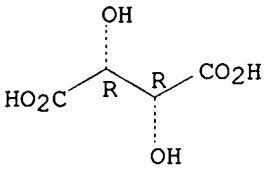
Absolute stereochemistry.



CM 2

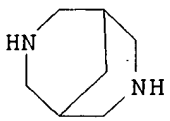
CRN 87-69-4
CMF C4 H6 O6
CDES 1:R2:R*,R*

Absolute stereochemistry.



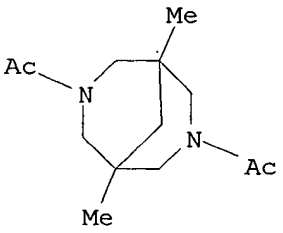
RE.CNT 2
RE
(1) Astra Aktiebolag; WO 9931100 A1 1999 CAPLUS
(2) Chugai, S; EP 0236679 A1 1987 CAPLUS

L13 ANSWER 12 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 2000:119501 CAPLUS
DN 132:264736
TI Synthesis of chiral amino alcohols embodying the bispidine framework and their application as ligands in enantioselectively catalyzed additions to C=O and C=C groups
AU Spieler, Jan; Huttenloch, Oliver; Waldmann, Herbert
CS Max-Planck-Institut fur moleculare Physiologie, Dortmund, D-44227, Germany
SO Eur. J. Org. Chem. (2000), (3), 391-399
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OS CASREACT 132:264736
AB Two generally applicable routes for the synthesis of chiral amino alcs. embodying the bispidine framework have been developed. In a linear route the bispidine framework is built up successively from chiral primary amines via intermediate formation of a piperidinone and a bispidinone. In a convergent route an achiral bispidine is formed first and then the N-substituents are introduced by reaction of the nitrogen bases with chiral electrophiles. In order to det. if the bispidine core and its N-substituents can influence the steric course of enantioselective transformations, bispidine amino alcs. built up by these two routes were investigated as chiral ligands in the enantioselectively catalyzed addn. of diethylzinc to aldehydes and chalcone. In general, tridentate ligands contg. one chiral amino alc. fragment and a second amino substituent without a stereogenic center were more efficient than tetradentate ligands with two amino alc. structural units. With the best ligands the enantioselective addn. of diethylzinc to arom. and aliph. aldehydes proceeded with 83-98% ee and the nickel-catalyzed addn. of diethylzinc to chalcone was achieved with up to 85% ee.
IT **280-74-0P**, 3,7-Diazabicyclo[3.3.1]nonane
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of chiral amino alcs. embodying the bispidine framework and their use as ligands in enantioselective addns.)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



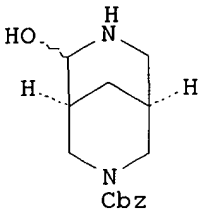
RE.CNT 43
RE
(1) Anon; FR 2274300 1976 CAPLUS
(2) Anon; DE 2428792 1976 CAPLUS
(4) Birk, C; Tetrahedron 1996, V52, P12745 CAPLUS
(5) Bohlmann, F; Chem Ber 1958, V91, P2157 CAPLUS
(7) Bolm, C; Chem Ber 1992, V125, P1191 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1999:770373 CAPLUS
DN 132:63833
TI Conformational switching of 3,7-diacyl-3,7-diazabicyclo[3.3.1]nonanes by metal binding and by solvent changes
AU Palyulin, Vladimir A.; Emets, Sergei V.; Chertkov, Vyacheslav A.; Kasper, Christoph; Schneider, Hans-Jorg
CS Dep. Chemistry, Moscow State Univ., Moscow, 119899, Russia
SO Eur. J. Org. Chem. (1999), (12), 3479-3482
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
AB 3,7-Diacyl-3,7-diazabicyclo[3.3.1]nonanes (3,7-diacylbispidines) can switch from antiparallel to parallel conformations upon addn. of LaCl3 thus serving as models for potential allosteric systems. The solvent effect on the conformational switching was also studied.
IT **253447-26-6P**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(conformational switching of 3,7-diacyl-3,7-diazabicyclo[3.3.1]nonanes by metal binding and by solvent changes)
RN 253447-26-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3,7-diacetyl-1,5-dimethyl- (9CI) (CA INDEX NAME)



RE.CNT 26
RE
(2) Ashton, P; Chem Eur J 1997, V3, P152 CAPLUS
(4) Baldes, R; Angew Chem Int Ed Engl 1995, V34, P321 CAPLUS
(6) Bauer, H; Chem Ber 1994, V127, P1993 CAPLUS
(7) Feringa, B; Tetrahedron 1993, V49, P8267 CAPLUS
(8) Ikeda, T; J Am Chem Soc 1995, V117, P1453 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1999:631969 CAPLUS
DN 132:12427
TI An efficient chemoenzymatic access to chiral 3,7-diazabicyclo[3.3.1]nonane derivatives
AU Danieli, Bruno; Lesma, Giordano; Passarella, Daniele; Silvani, Alessandra; Viviani, Nunzia
CS Dipartimento di Chimica Organica e Industriale, Universita degli Studi di Milano, Centro CNR di Studio per le Sostanze Organiche Naturali, Milan, 21-20133, Italy
SO Tetrahedron (1999), 55(40), 11871-11878
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier Science Ltd.
DT Journal
LA English
GI



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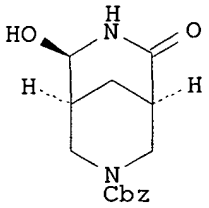
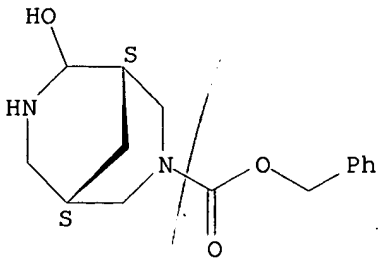


II

AB Enantiopure 3,7-diazabicyclo[3.3.1]nonane derivs. I and II, potential precursors of quinolizidine alkaloids, were synthesized in high yields, starting from the biocatalytic asymmetrization of .sigma.-sym. 3,5-disubstituted piperidines. Their application to the total synthesis of the new pharmacol. active compds. are also described.

IT **251346-88-0P**
RL: BPN (Biosynthetic preparation); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(chemoenzymic access to chiral 3,7-diazabicyclo[3.3.1]nonane derivs.)
RN 251346-88-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 6-hydroxy-, phenylmethyl ester, (1S,5S)- (9CI) (CA INDEX NAME)

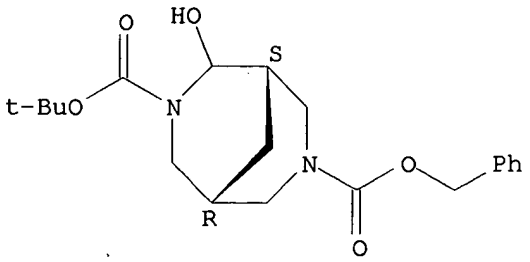
Absolute stereochemistry.



IT **251346-95-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(chemoenzymic access to chiral 3,7-diazabicyclo[3.3.1]nonane derivs.)

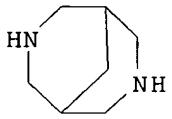
RN 251346-95-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 2-hydroxy-, 3-(1,1-dimethylethyl) 7-(phenylmethyl) ester, (1S,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 17
RE
(3) Danieli, B; J Org Chem 1998, V63, P3492 CAPLUS
(4) Danieli, B; Tetrahedron 1994, V50, P8837 CAPLUS
(5) Danieli, B; Tetrahedron: Asymm 1996, V7, P345 CAPLUS
(6) Dess, D; J Am Chem Soc 1991, V113, P7277 CAPLUS
(7) Fazylov, S; Zh Obshch Khim 1995, V65, P877 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

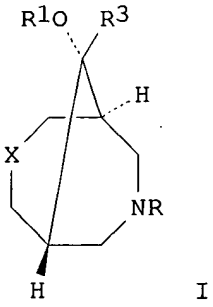
L13 ANSWER 15 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1999:445821 CAPLUS
DN 131:179515
TI Derivatives of 7-aza-3-thiabicyclo[3.3.1]nonanes and 3,7-diazabicyclo[3.3.1]nonanes as potential antiarrhythmic agents
AU Couch, Kevin Michael
CS Oklahoma State Univ., Stillwater, OK, USA
SO (1998) 287 pp. Avail.: UMI, Order No. DA9918789
From: Diss. Abstr. Int., B 1999, 60(2), 657
DT Dissertation
LA English
AB Unavailable
IT **280-74-0DP**, 3,7-Diazabicyclo[3.3.1]nonane, derivs.
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of azathiabicyclononanes and diazabicyclononanes as potential antiarrhythmic agents)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



L13 ANSWER 16 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1999:421688 CAPLUS
DN 131:58813
TI Preparation of bicyclic nitrogen compounds as Kv2.1 antagonists
IN Bubacz, Dulce Garrido; Dukes, Iain David; McLean, Ed Williams; Noe, Robert Anderson; Peat, Andrew James; Szewczyk, Jerzy Ryszard; Thomson, Stephen Andrew; Worley, Jennings Franklin, III
PA Glaxo Group Limited, UK
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9932487	A1	19990701	WO 1998-EP8085	19981216
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9919671	A1	19990712	AU 1999-19671	19981216
EP 1042322	A1	20001011	EP 1998-964497	19981216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI GB 1997-26630	A	19971218		
WO 1998-EP8085	W	19981216		

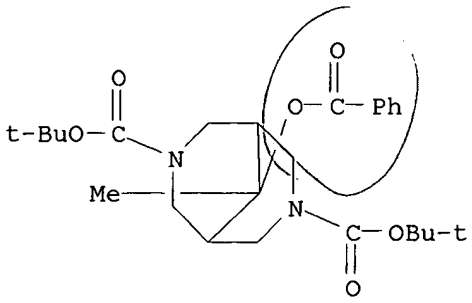
OS MARPAT 131:58813
GI



I

AB Treatment of non-insulin dependent diabetes mellitus, i.e., administration of antagonists I [R = alkyl, alkenyl, alkoxyalkyl, etc.; R1 = substituted benzyl, substituted benzoyl, etc.; X = S, O, NR2; R3 = H, alkyl] of the delayed rectifier potassium channel Kv2.1, is reported. E.g., anti-3-(4-(3,4-methylenedioxyphenyl)butyl)-7-methyl-3,7-diazabicyclononan-9-ol 4-chlorobenzoate was prepd.
IT **228270-24-4P 228270-26-6P 228270-27-7P**
228270-29-9P 228270-30-2P 228270-31-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

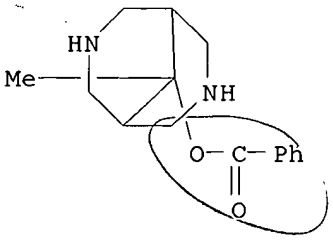
(prepn. of bicyclic nitrogen compds. as Kv2.1 antagonists)
RN 228270-24-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 9-(benzoyloxy)-9-methyl-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 228270-26-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 9-methyl-, benzoate (ester), bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

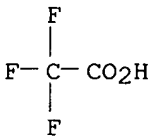
CM 1

CRN 228270-25-5
CMF C15 H20 N2 O2



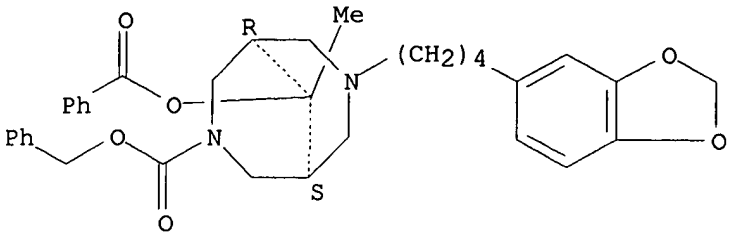
CM 2

CRN 76-05-1
CMF C2 H F3 O2



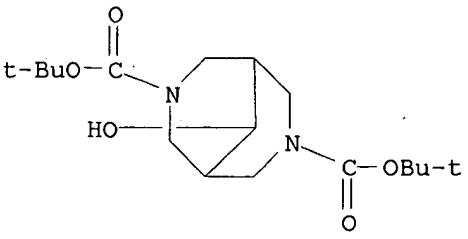
RN 228270-27-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(1,3-benzodioxol-5-yl)butyl]-9-(benzoyloxy)-9-methyl-, phenylmethyl ester, (9-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

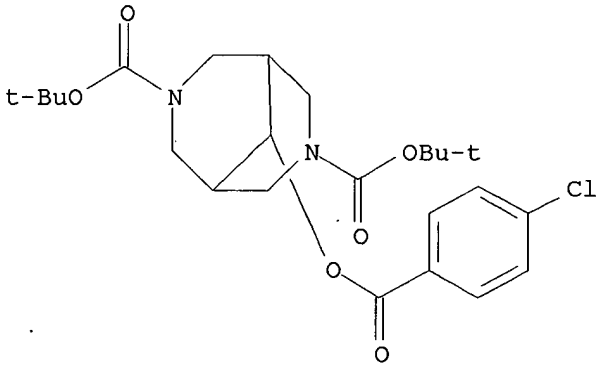


RN 228270-29-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 9-hydroxy-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

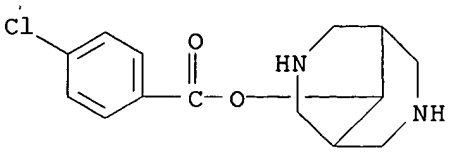
provisional



RN 228270-30-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 9-[(4-chlorobenzoyl)oxy]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 228270-31-3 CAPLUS
CN Benzoic acid, 4-chloro-, 3,7-diazabicyclo[3.3.1]non-9-yl ester, dihydrochloride (9CI) (CA INDEX NAME)



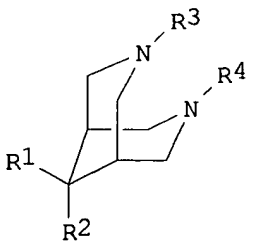
●2 HCl

RE.CNT 7
RE
(2) Izquierdo, M; Journal of Molecular Structure 1989, V213, P175 CAPLUS
(3) Merck; WO 9716438 A 1997 CAPLUS
(4) Neurosearch; EP 0528749 A 1993 CAPLUS
(5) Richter, G; GB 2102801 A 1981 CAPLUS
(6) Richter, G; WO 9622096 A 1996 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1999:404964 CAPLUS
DN 131:58860
TI Preparation of 3,7-diazabicyclo[3.3.1]nonane-3-carboxylates as antiarrhythmic agents
IN Strandlund, Gert; Alstermark, Christer; Bjore, Annika; Bjorsne, Magnus; Frantsi, Marianne; Halvarsson, Torbjorn; Hoffmann, Kurt-Jurgen; Lindstedt, Eva-Lotte; Polla, Magnus
PA Astra Aktiebolag, Swed.
SO PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9931100	A1	19990624	WO 1998-SE2276	19981210
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	ZA 9811130	A	19990617	ZA 1998-11130	19981204
	AU 9917953	A1	19990705	AU 1999-17953	19981210
	BR 9813668	A	20001017	BR 1998-13668	19981210
	EP 1047695	A1	20001102	EP 1998-962796	19981210
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2000003137	A	20000817	NO 2000-3137	20000616
PRAI	SE 1997-4709	A	19971217		
	WO 1998-SE2276	W	19981210		

OS MARPAT 131:58860
GI



I

AB Title compds. [I; R1,R2 = H or alkyl; R1R2 = OCH2CH2O, (CH2)4-5; R3 = CCR10R11AR; A = bond, alkylene, (CH2)nZ, CONR20, etc.; B = bond, alkylene, NR23(CH2)r, O(CH2)r; R = (un)substituted Ph; R4 = COXR9; R9 = alkyl, (un)substituted phenyl(alkyl), -naphthyl; R10 = H or OH; R11,R20,R23 = H or alkyl; X = O or S; Z = NR20, SO0-2, O; n,r = 0-4] were prepd. Thus,

4-(NC)C6H4OH was condensed with epichlorohydrin and the product aminated by I (R1 = R2 = H, R4 = CO2CMe3)(II; R3 = H)(prepn. given) to give II [R3 = CH2CH(OH)CH2OC6H4(CN)-4]. Data for biol. activity of I were given.

IT **227939-98-2P 227939-99-3P 227940-00-3P**
227940-01-4P 227940-02-5P 227940-03-6P
227940-05-8P 227940-06-9P 227940-07-0P
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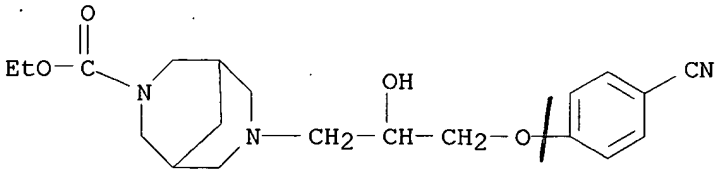
227940-65-0P 227940-66-1P 227940-67-2P
227940-68-3P 227940-69-4P 227955-64-8P
227955-68-2P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 3,7-diazabicyclo[3.3.1]nonane-3-carboxylates as antiarrhythmic agents)

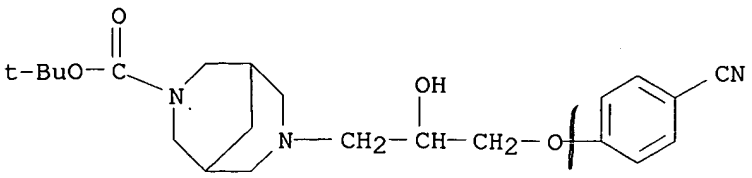
RN 227939-98-2 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, ethyl ester (9CI) (CA INDEX NAME)



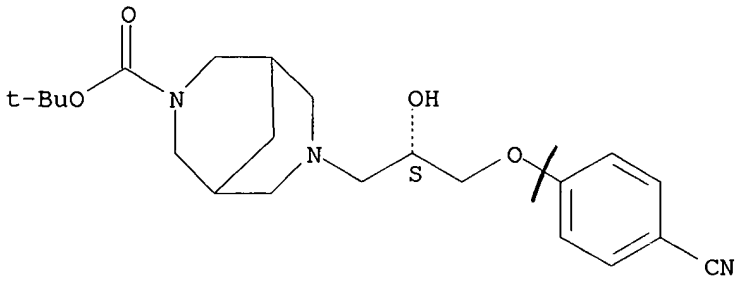
RN 227939-99-3 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



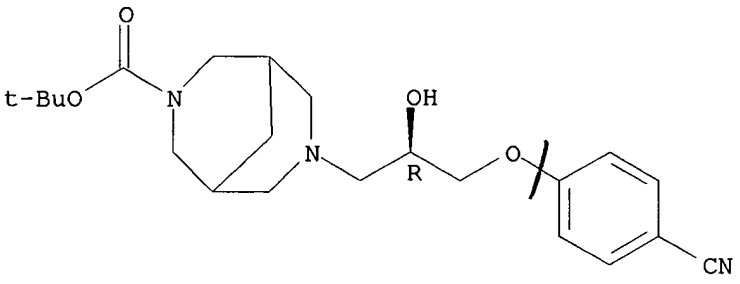
RN 227940-00-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

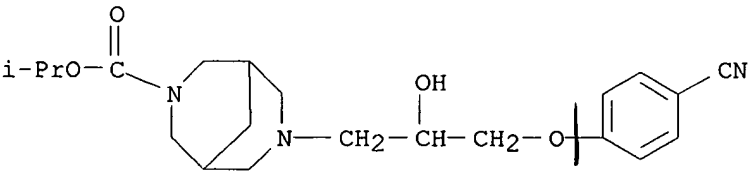


RN 227940-01-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2R)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

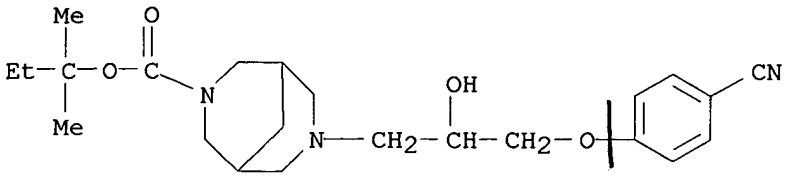
Absolute stereochemistry.



RN 227940-02-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

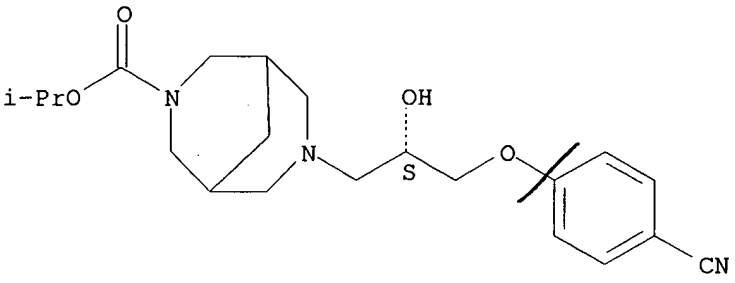


RN 227940-03-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylpropyl ester (9CI) (CA INDEX NAME)

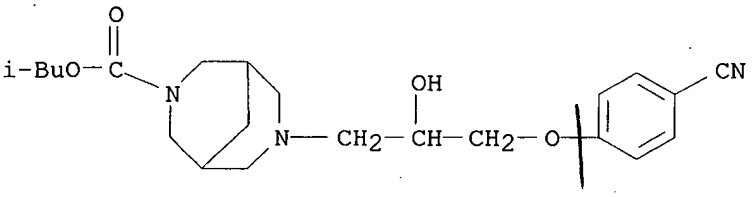


RN 227940-05-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

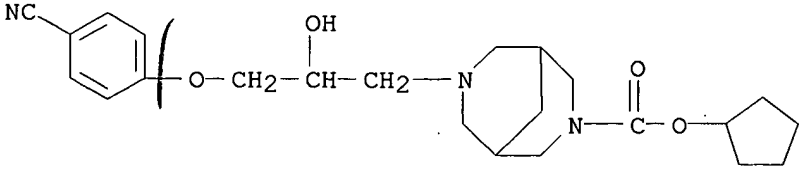
Absolute stereochemistry.



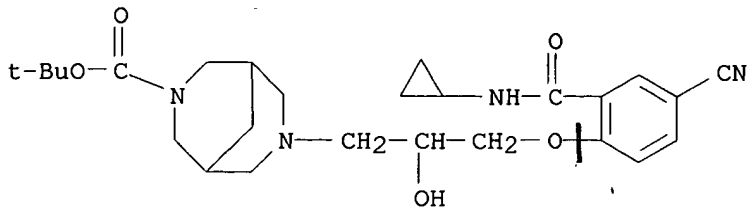
RN 227940-06-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2-methylpropyl ester (9CI) (CA INDEX NAME)



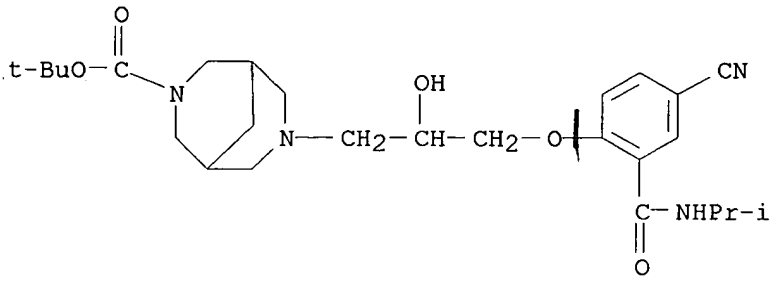
RN 227940-07-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, cyclopentyl ester (9CI) (CA INDEX NAME)



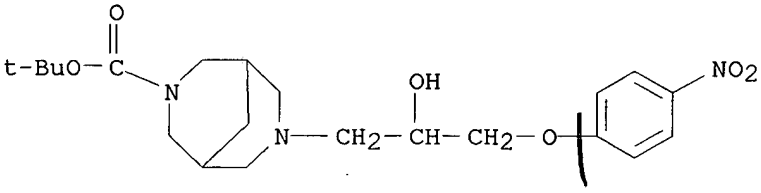
RN 227940-08-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[4-cyano-2-[(cyclopropylamino)carbonyl]phenoxy]-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



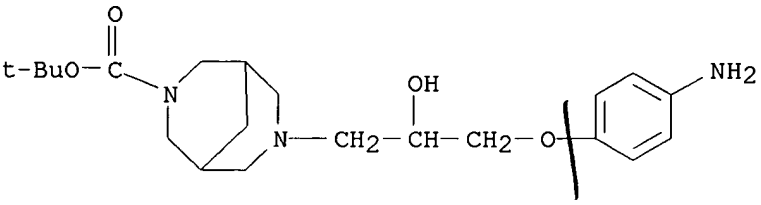
RN 227940-09-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[4-cyano-2-[[(1-methylethyl)amino]carbonyl]phenoxy]-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 227940-10-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-hydroxy-3-(4-nitrophenoxy)propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

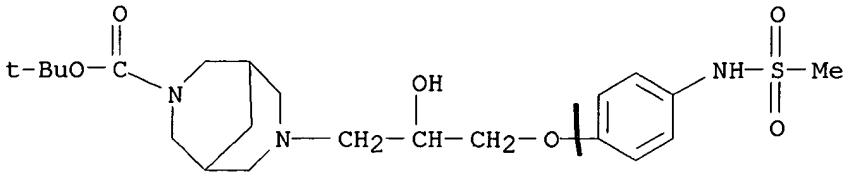


RN 227940-11-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-aminophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

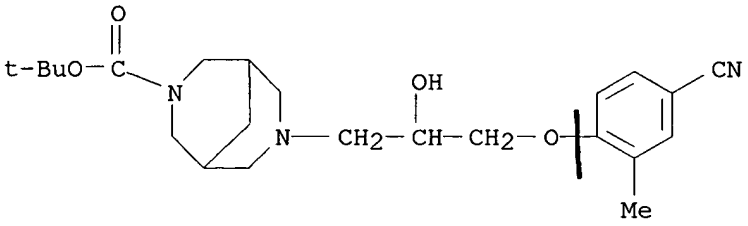


RN 227940-12-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-hydroxy-3-[4-[(methylsulfonyl)amino]phenoxy]propyl]-, 1,1-dimethylethyl ester (9CI)

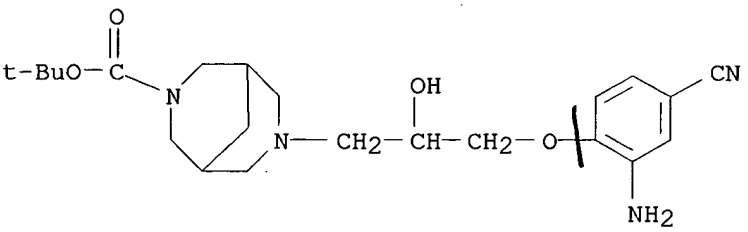
(CA INDEX NAME)



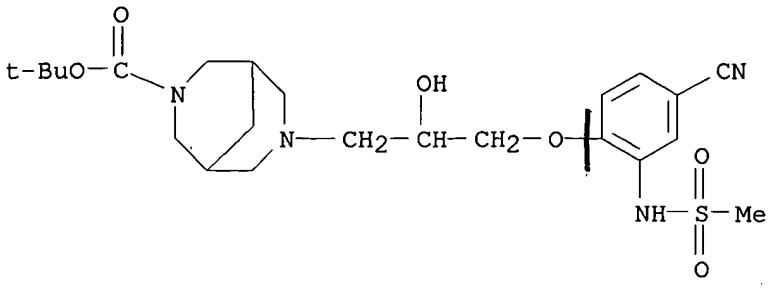
RN 227940-13-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyano-2-methylphenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



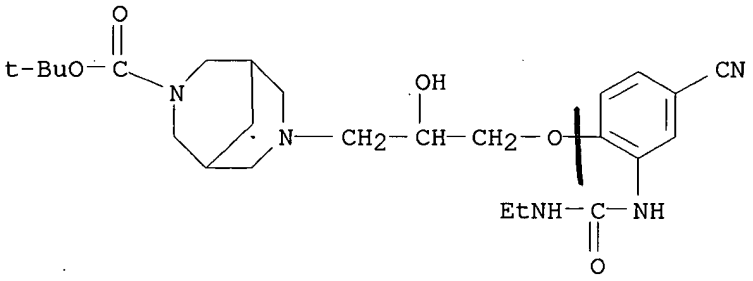
RN 227940-14-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(2-amino-4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



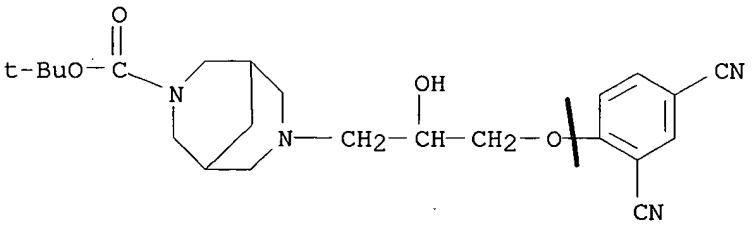
RN 227940-15-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[4-cyano-2-[(methylsulfonyl)amino]phenoxy]-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



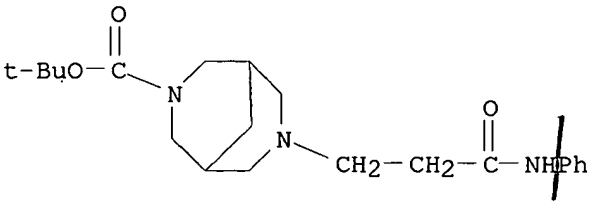
RN 227940-16-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[4-cyano-2-[[(ethylamino)carbonyl]amino]phenoxy]-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



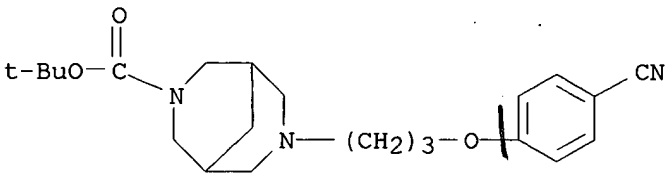
RN 227940-17-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(2,4-dicyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



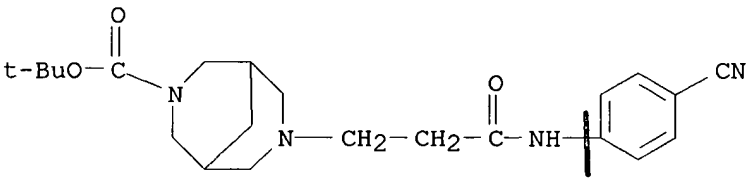
RN 227940-18-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-oxo-3-(phenylamino)propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



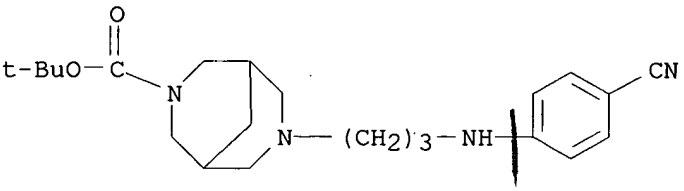
RN 227940-19-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



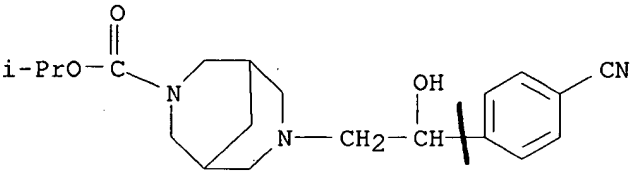
RN 227940-20-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[(4-cyanophenyl)amino]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



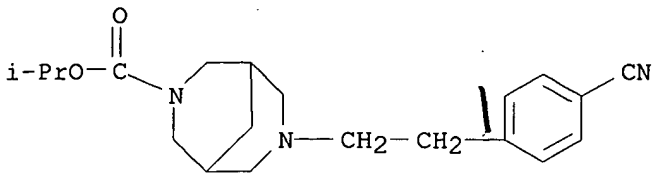
RN 227940-21-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[(4-cyanophenyl)amino]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



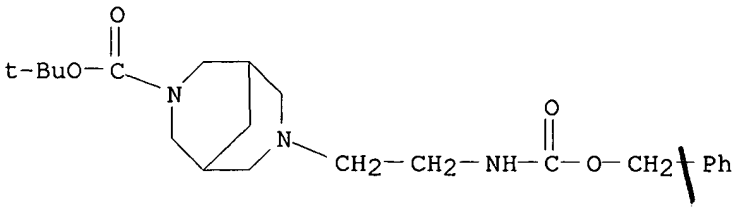
RN 227940-23-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-(4-cyanophenyl)-2-hydroxyethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



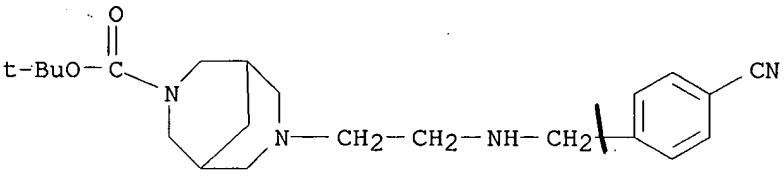
RN 227940-24-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-(4-cyanophenyl)ethyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



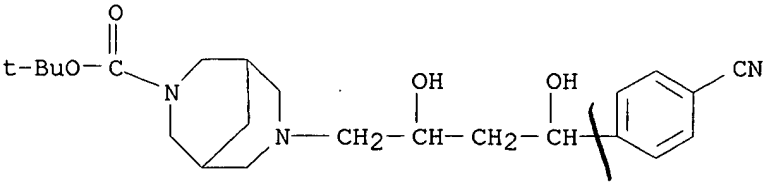
RN 227940-25-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-[[(phenylmethoxy)carbonyl]amino]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



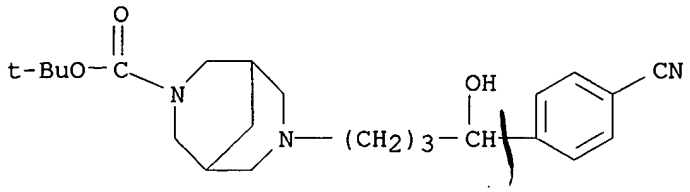
RN 227940-26-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-[[(4-cyanophenyl)methyl]amino]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



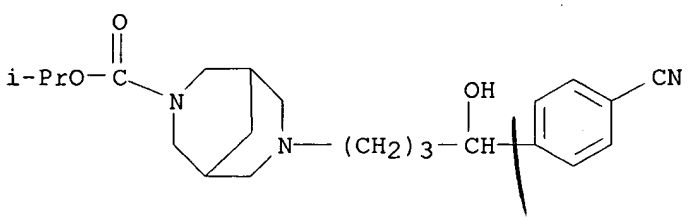
RN 227940-27-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-2,4-dihydroxybutyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 227940-28-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-hydroxybutyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

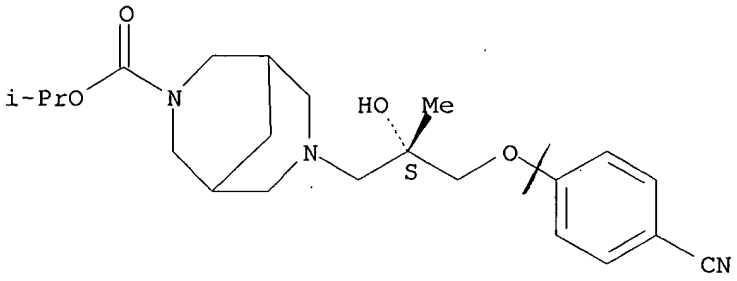


RN 227940-29-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-hydroxybutyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



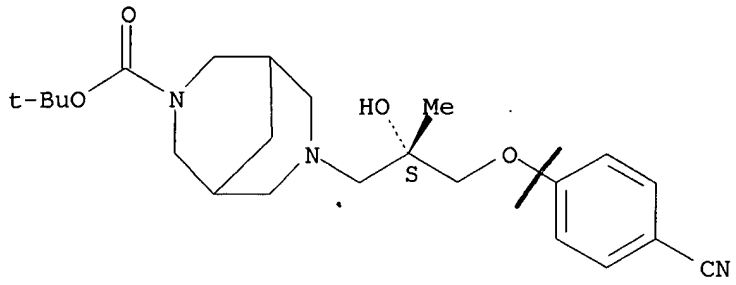
RN 227940-30-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxy-2-methylpropyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

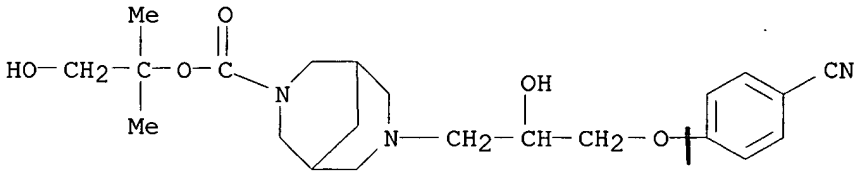


RN 227940-31-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxy-2-methylpropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

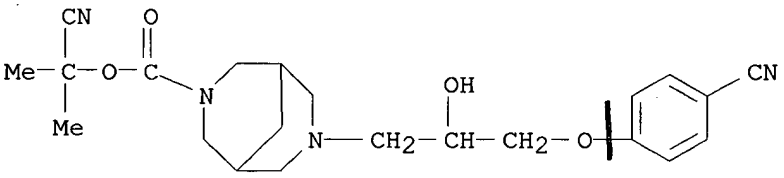
Absolute stereochemistry.



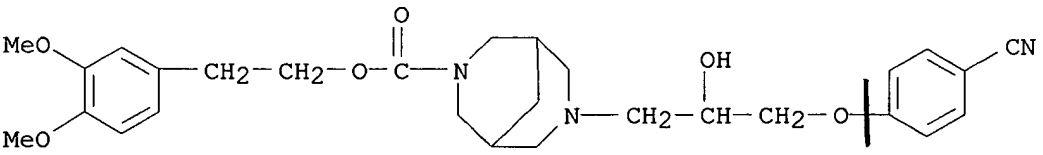
RN 227940-32-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2-hydroxy-1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



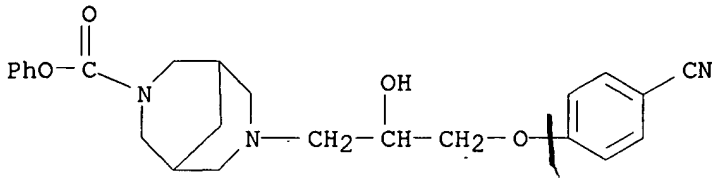
RN 227940-33-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1-cyano-1-methylethyl ester (9CI) (CA INDEX NAME)



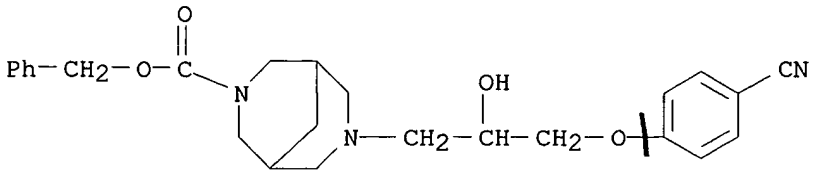
RN 227940-34-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2-(3,4-dimethoxyphenyl)ethyl ester (9CI) (CA INDEX NAME)



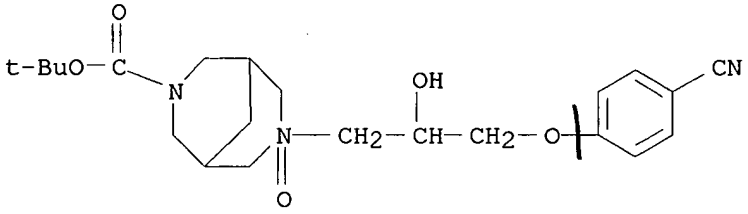
RN 227940-35-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, phenyl ester (9CI) (CA INDEX NAME)



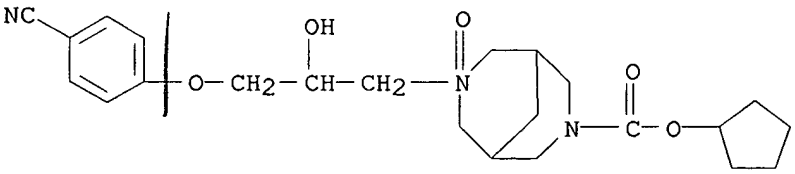
RN 227940-36-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



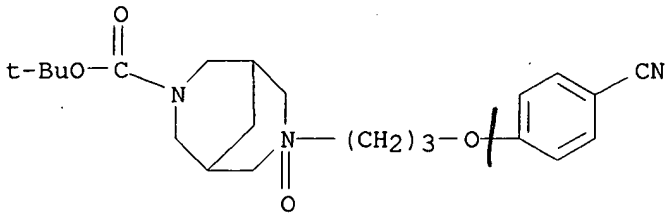
RN 227940-39-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester, 7-oxide (9CI) (CA INDEX NAME)



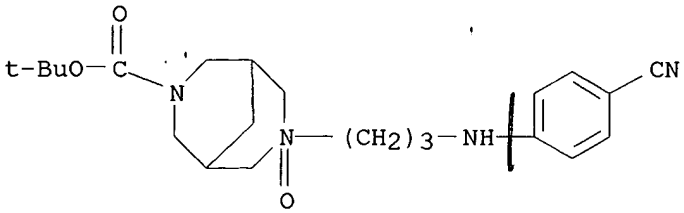
RN 227940-40-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, cyclopentyl ester, 7-oxide (9CI) (CA INDEX NAME)



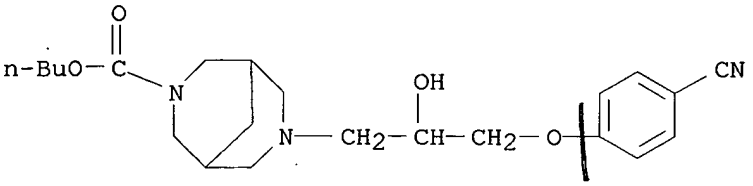
RN 227940-41-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)propyl]-, 1,1-dimethylethyl ester, 7-oxide (9CI) (CA INDEX NAME)



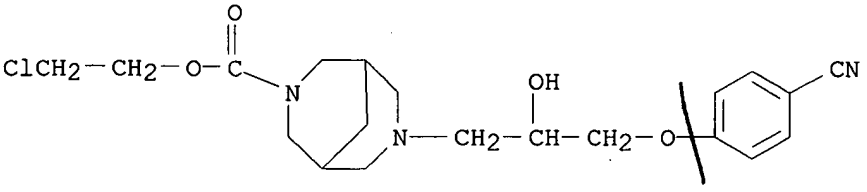
RN 227940-42-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[(4-cyanophenyl)amino]propyl]-, 1,1-dimethylethyl ester, 7-oxide (9CI) (CA INDEX NAME)



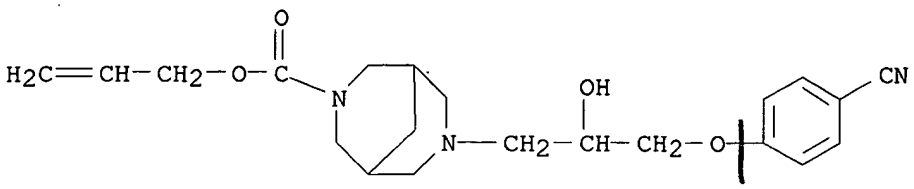
RN 227940-43-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, butyl ester (9CI) (CA INDEX NAME)



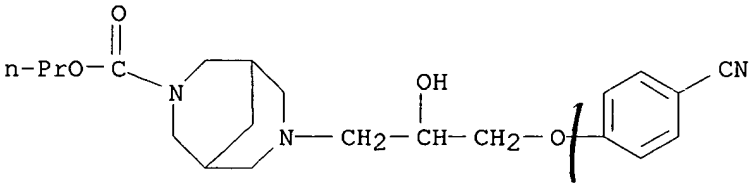
RN 227940-44-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2-chloroethyl ester (9CI) (CA INDEX NAME)



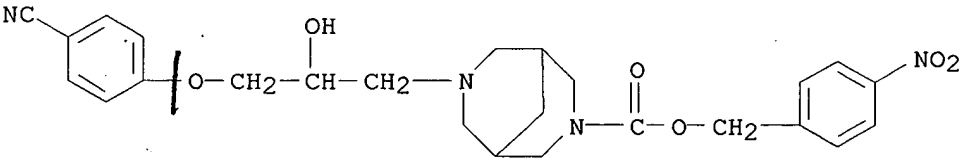
RN 227940-45-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)



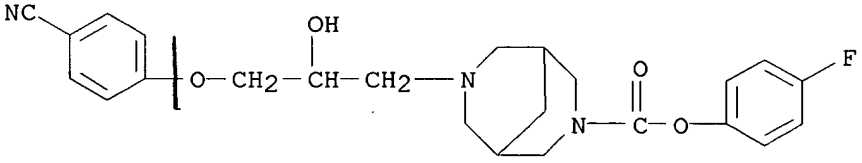
RN 227940-46-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, propyl ester (9CI) (CA INDEX NAME)



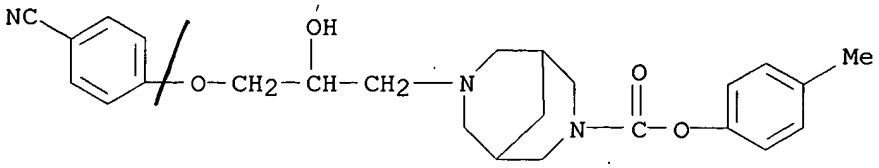
RN 227940-47-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



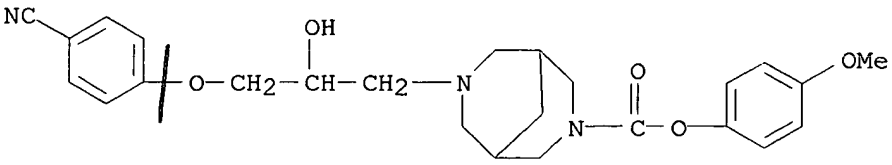
RN 227940-48-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 4-fluorophenyl ester (9CI) (CA INDEX NAME)



RN 227940-49-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 4-methylphenyl ester (9CI) (CA INDEX NAME)

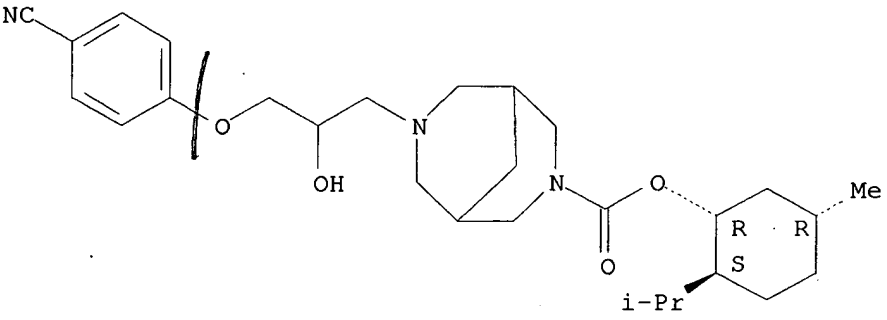


RN 227940-50-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 4-methoxyphenyl ester (9CI) (CA INDEX NAME)

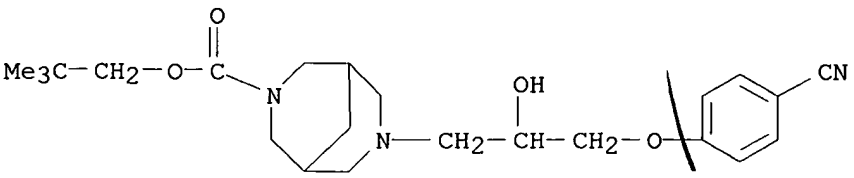


RN 227940-51-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

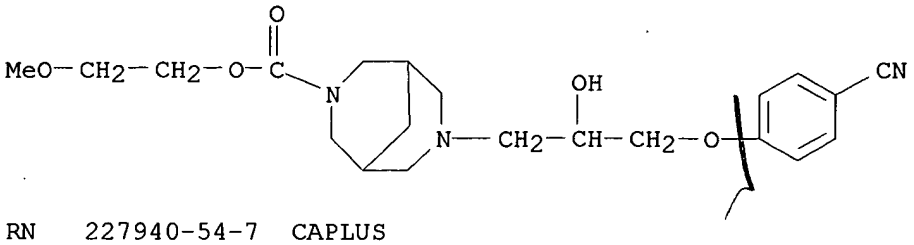
Absolute stereochemistry.



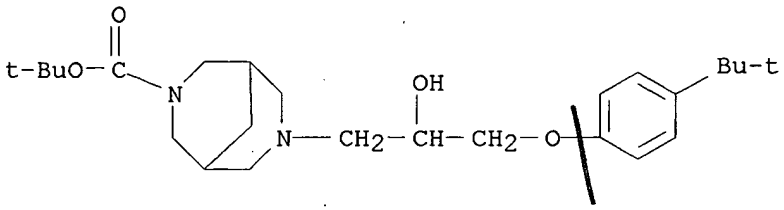
RN 227940-52-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2,2-dimethylpropyl ester (9CI) (CA INDEX NAME)



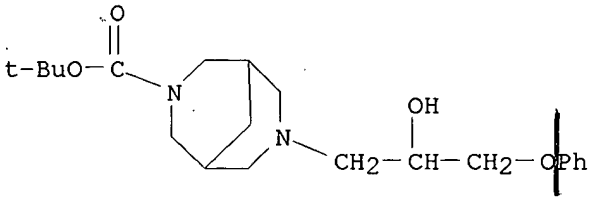
RN 227940-53-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



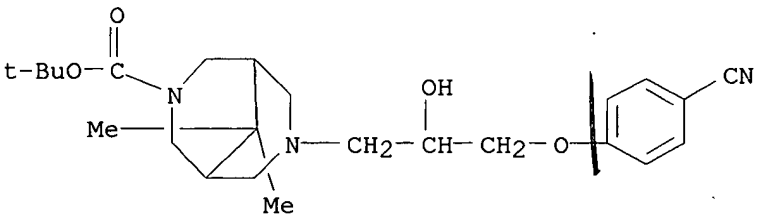
RN 227940-54-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[4-(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



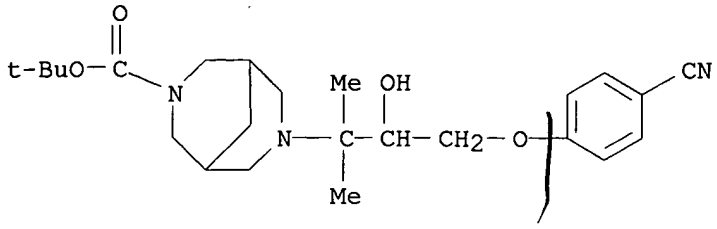
RN 227940-55-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(2-hydroxy-3-phenoxypropyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



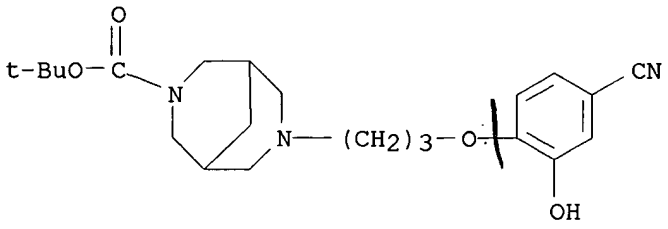
RN 227940-56-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9,9-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



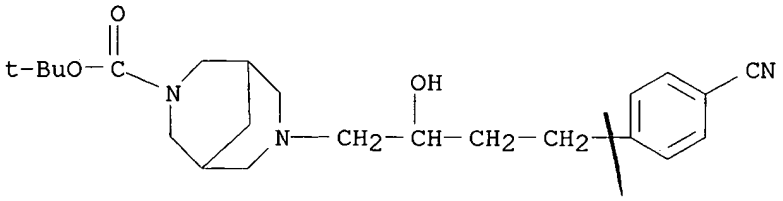
RN 227940-57-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxy-1,1-dimethylpropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



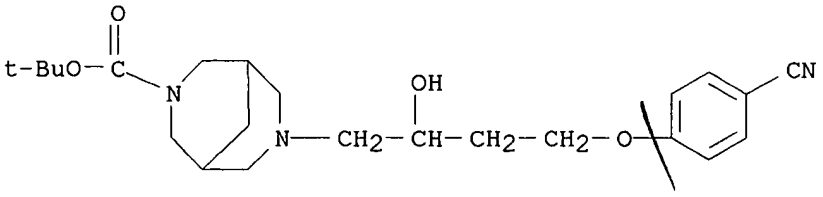
RN 227940-58-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyano-2-hydroxyphenoxy)propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



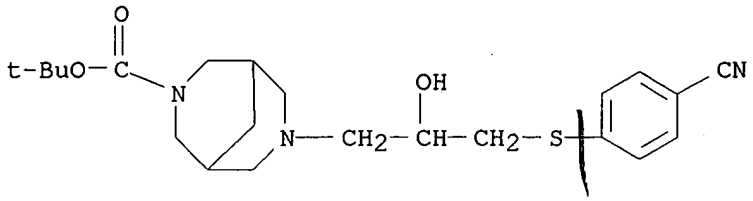
RN 227940-59-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-2-hydroxybutyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



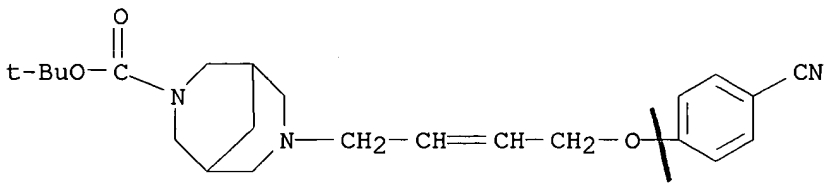
RN 227940-60-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenoxy)-2-hydroxybutyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



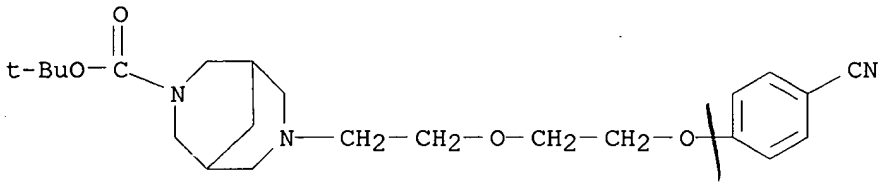
RN 227940-61-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-[(4-cyanophenyl)thio]-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



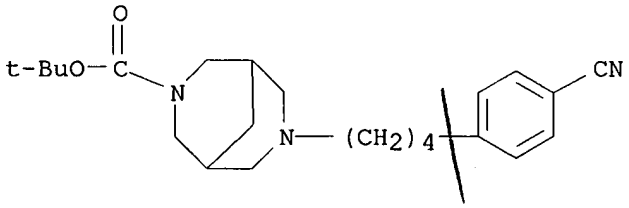
RN 227940-62-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenoxy)-2-butenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



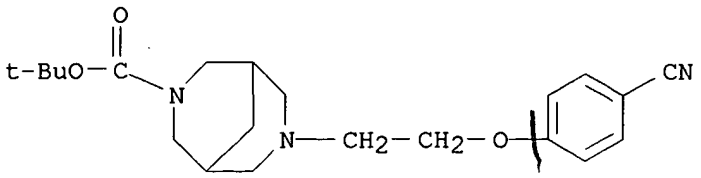
RN 227940-63-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-[2-(4-cyanophenoxy)ethoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



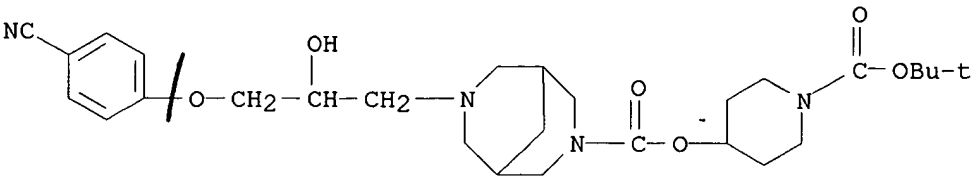
RN 227940-64-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 227940-65-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[2-(4-cyanophenoxy)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

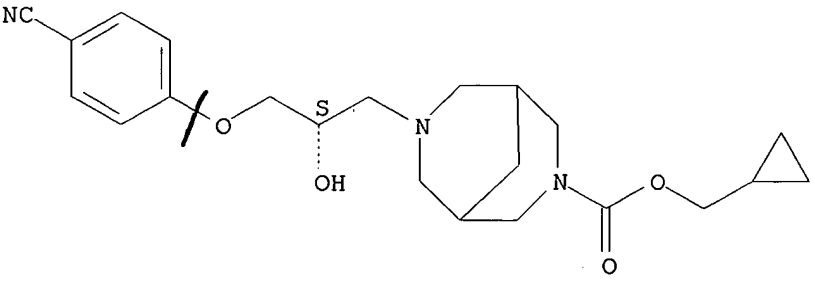


RN 227940-66-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl ester (9CI) (CA INDEX NAME)

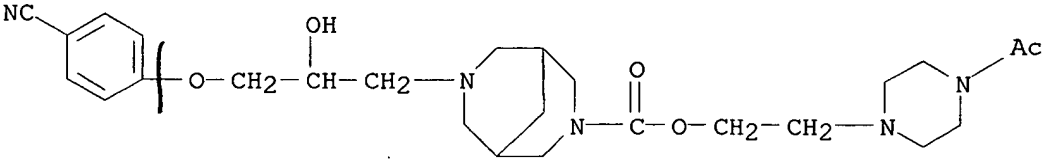


RN 227940-67-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2S)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, cyclopropylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

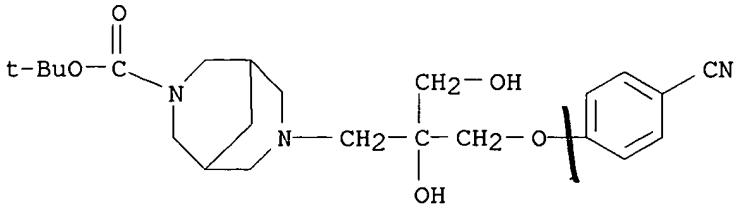


RN 227940-68-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-, 2-(4-acetyl-1-piperazinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 227940-69-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-

hydroxy-2-(hydroxymethyl)propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

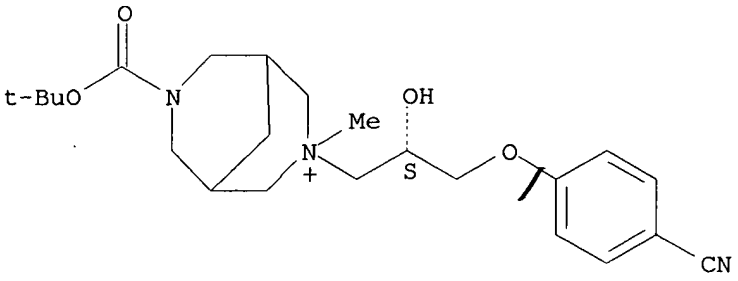


RN 227955-64-8 CAPLUS
CN 7-Aza-3-azoniabicyclo[3.3.1]nonane, 3-[(2R)-3-(4-cyanophenoxy)-2-hydroxypropyl]-7-[(1,1-dimethylethoxy)carbonyl]-3-methyl-, rel-, acetate (salt) (9CI) (CA INDEX NAME)

CM 1

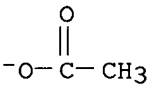
CRN 227955-63-7
CMF C23 H34 N3 O4

Absolute stereochemistry.



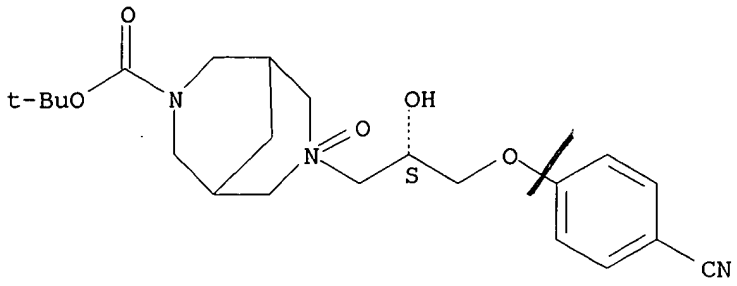
CM 2

CRN 71-50-1
CMF C2 H3 O2

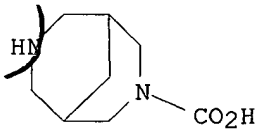


RN 227955-68-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[(2R)-3-(4-cyanophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester, 7-oxide, rel- (9CI) (CA INDEX NAME)

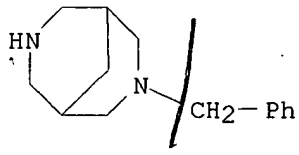
Absolute stereochemistry.



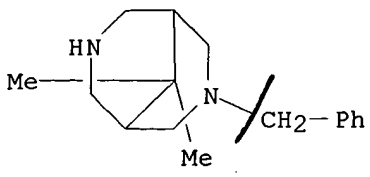
IT **227941-21-1**
RL: RCT (Reactant)
(prepn. of 3,7-diazabicyclo[3.3.1]nonane-3-carboxylates as antiarrhythmic agents)
RN 227941-21-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid (9CI) (CA INDEX NAME)



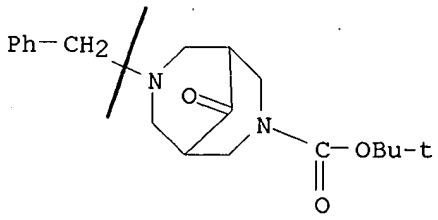
IT **69407-32-5P 120466-46-8P 227940-70-7P**
227940-71-8P 227940-72-9P 227940-73-0P
227940-74-1P 227940-75-2P 227940-76-3P
227940-78-5P 227940-79-6P 227940-80-9P
227940-84-3P 227940-88-7P 227940-90-1P
227940-94-5P 227940-95-6P 227940-96-7P
227940-97-8P 227940-98-9P 227940-99-0P
227941-06-2P 227941-07-3P 227941-17-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 3,7-diazabicyclo[3.3.1]nonane-3-carboxylates as antiarrhythmic agents)
RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



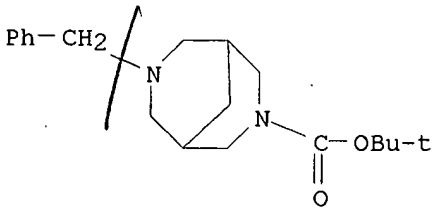
RN 120466-46-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



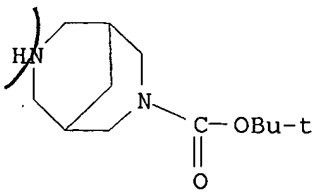
RN 227940-70-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-oxo-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



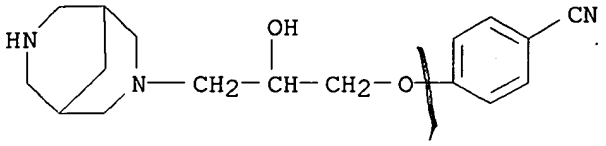
RN 227940-71-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



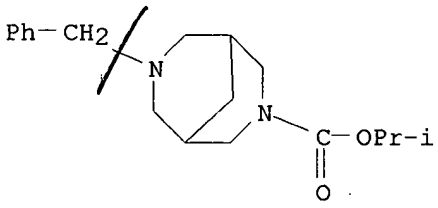
RN 227940-72-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



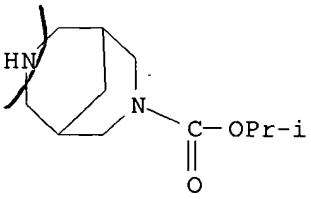
RN 227940-73-0 CAPLUS
CN Benzonitrile, 4-[3-(3,7-diazabicyclo[3.3.1]non-3-yl)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)



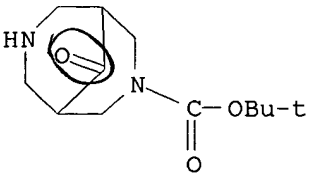
RN 227940-74-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1-methylethyl ester (9CI) (CA INDEX NAME)



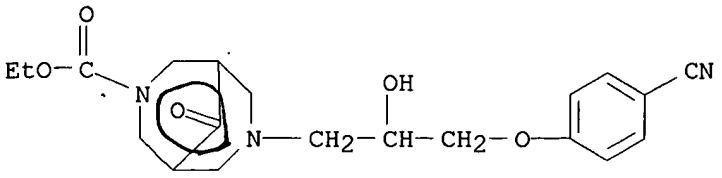
RN 227940-75-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1-methylethyl ester (9CI) (CA INDEX NAME)



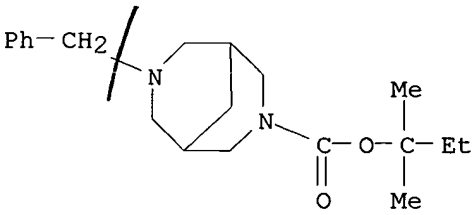
RN 227940-76-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



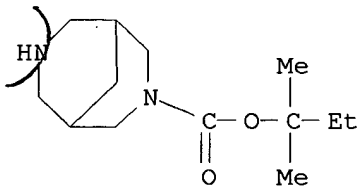
RN 227940-78-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyanophenoxy)-2-hydroxypropyl]-9-oxo-, ethyl ester (9CI) (CA INDEX NAME)



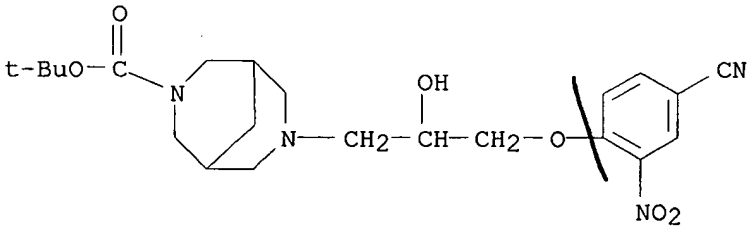
RN 227940-79-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 1,1-dimethylpropyl ester (9CI) (CA INDEX NAME)



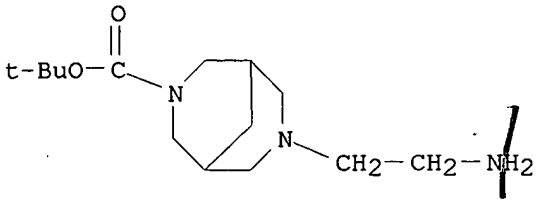
RN 227940-80-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 1,1-dimethylpropyl ester (9CI) (CA INDEX NAME)



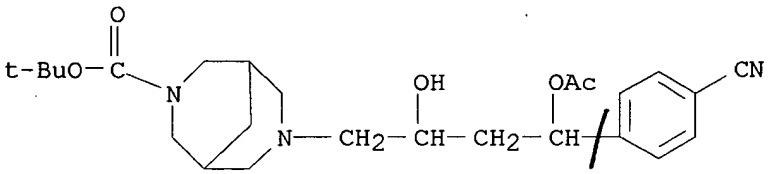
RN 227940-84-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[3-(4-cyano-2-nitrophenoxy)-2-hydroxypropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



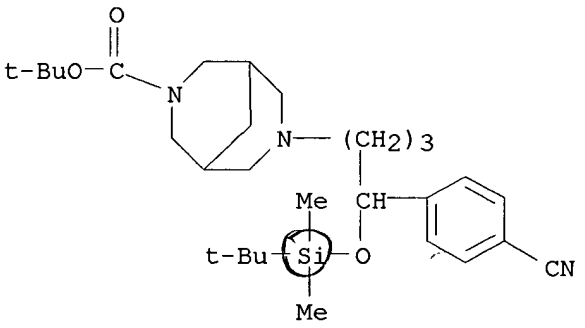
RN 227940-88-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(2-aminoethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



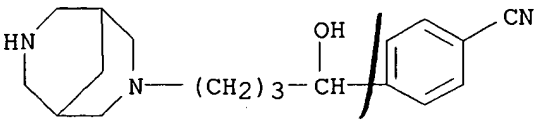
RN 227940-90-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(acetyloxy)-4-(4-cyanophenyl)-2-hydroxybutyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



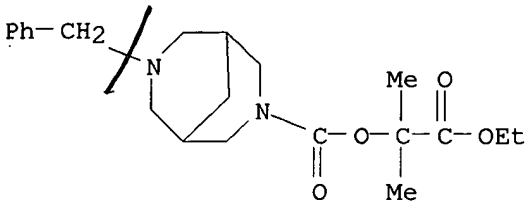
RN 227940-94-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-[4-(4-cyanophenyl)-4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



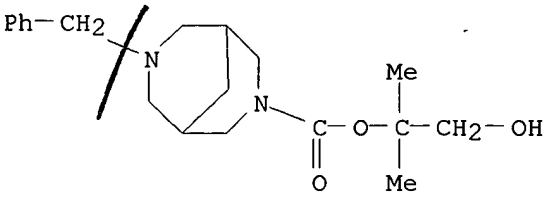
RN 227940-95-6 CAPLUS
CN Benzonitrile, 4-[4-(3,7-diazabicyclo[3.3.1]non-3-yl)-1-hydroxybutyl]- (9CI) (CA INDEX NAME)



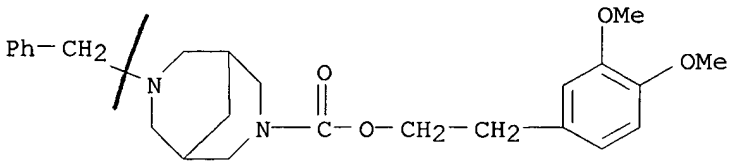
RN 227940-96-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 2-ethoxy-1,1-dimethyl-2-oxoethyl ester (9CI) (CA INDEX NAME)



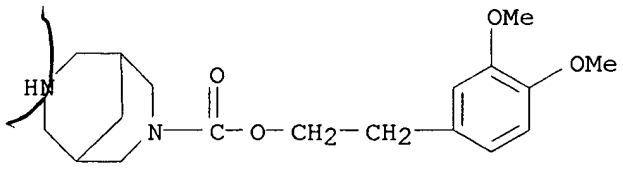
RN 227940-97-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 2-hydroxy-1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



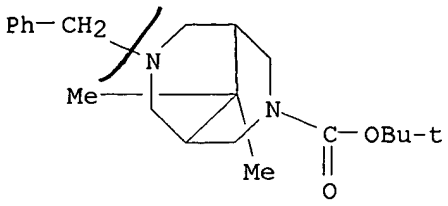
RN 227940-98-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 7-(phenylmethyl)-, 2-(3,4-dimethoxyphenyl)ethyl ester (9CI) (CA INDEX NAME)



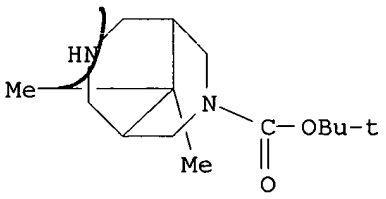
RN 227940-99-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 2-(3,4-dimethoxyphenyl)ethyl ester (9CI) (CA INDEX NAME)



RN 227941-06-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9,9-dimethyl-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

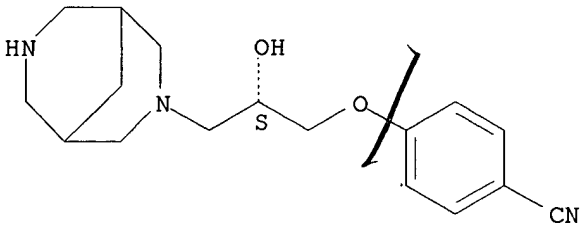


RN 227941-07-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9,9-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 227941-17-5 CAPLUS
CN Benzonitrile, 4-[(2S)-3-(3,7-diazabicyclo[3.3.1]non-3-yl)-2-hydroxypropoxy]-, dihydrochloride (9CI) (CA INDEX NAME)

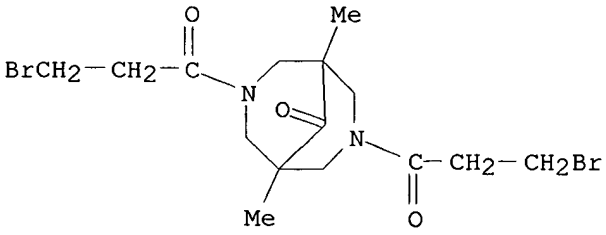
Absolute stereochemistry.



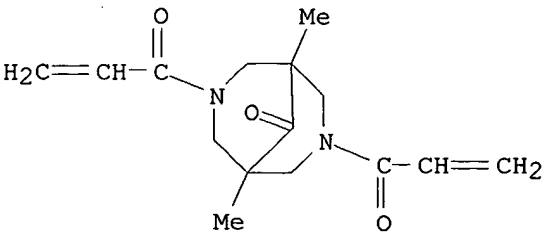
●2 HCl

RE.CNT 3
RE
(1) Basf Aktiengesellschaft; EP 0308843 A2 1989 CAPLUS
(2) Kall-Chemie Pharma Gmbh; EP 0306871 A2 1989 CAPLUS
(3) The Board Of Regents Of Oklahoma State University; WO 9107405 A1 1991 CAPLUS

L13 ANSWER 18 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1999:205876 CAPLUS
DN 130:311780
TI Syntheses and conversion of polyhedral, compounds. 26. Synthesis of new heteropolyhedral compounds by heterocyclization of certain 3,7-disubstituted derivatives of 3,7-diaza- and 1,3,7-triazabicyclo[3.3.1]nonanes
AU Agadzhanyan, Ts. E.; Arutyunyan, G. L.; Movsesyan, R. A.
CS A. L. Mndzhoyan Institute of Fine Organic Chemistry, National Academy of Sciences of the Republic of Armenia, Yerevan, 375014, Armenia
SO Chem. Heterocycl. Compd. (N. Y.) (1999), Volume Date 1998, 34(8), 979-982
CODEN: CHCCAL; ISSN: 0009-3122
PB Consultants Bureau
DT Journal
LA English
OS CASREACT 130:311780
AB The following heterocyclization reactions have been carried out: heterocyclization of 3,7-diacryloyl-3,7-diazabicyclo[3.3.1]nonane by benzylamine, heterocyclization of 3,7-diacryloyl-3,7-bis(.beta.-bromopropionyl)-, and 3,7-bis(.beta.-chloroethyl)-3,7-diazabicyclo[3.3.1]nonanes by hydrogen sulfide, and heterocyclization of 3,7-bis(bromoacetyl)- and 3,7-diacryloyl-1,3, 7-triazabicyclo[3.3.1]nonanes by benzylamine and hydrogen sulfide. New compds. were obtained, based on previously unknown thiadiaza-, triaza-, and tetraazatricyclic systems.
IT **80808-88-4 80808-89-5**
RL: RCT (Reactant)
(prepn. of heteropolyhedral compds. by heterocyclization of diaza- and triazabicyclononanes)
RN 80808-88-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-bis(3-bromo-1-oxopropyl)-1,5-dimethyl- (9CI) (CA INDEX NAME)

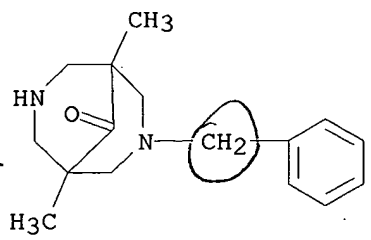


RN 80808-89-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3,7-bis(1-oxo-2-propenyl)- (9CI) (CA INDEX NAME)



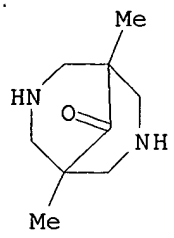
RE.CNT 6
RE
(1) Agadzhanyan, T; Arm Khim Zh 1981, V34, P963 CAPLUS
(2) Agadzhanyan, T; Arm Khim Zh 1983, V36, P730 CAPLUS
(3) Agadzhanyan, T; Chemotherapy of Tumors in the USSR [in Russian] 1982, 35, P55
(4) Agadzhanyan, T; Khim Geterotsikl Soedin 1994, 3, P393
(5) Agadzhanyan, T; Khim Geterotsikl Soedin 1997, 11, P1490
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1998:487604 CAPLUS
DN 129:188934
TI Molecular structure of 3-benzyl-1,5-dimethyl-3,7-diazabicyclo[3.3.1]nonan-9-one
AU Karapetyan, A. A.; Arutyunyan, A. D.; Agadjanyan, Ts. E.
CS Molecular Structure Research Center, Armenian Academy of Sciences, Armenia
SO J. Struct. Chem. (1998), 39(1), 143-146
CODEN: JSTCAM; ISSN: 0022-4766
PB Consultants Bureau
DT Journal
LA English
AB The crystal and mol. structures of the title compd. were detd. by x-ray crystallog. A double-chair conformation was confirmed.
IT **107606-88-2**, 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3-(phenylmethyl)-
RL: PRP (Properties)
(crystal and mol. structure and conformation of benzyldimethyldiazabicyclononanone)
RN 107606-88-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

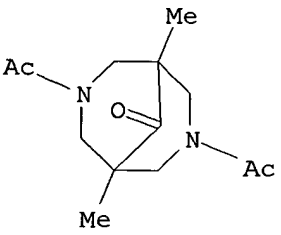


PROVISO

L18 ANSWER 20 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1998:484412 CAPLUS
DN 129:189250
TI Synthesis and conversions of polyhedral compounds. 25. Synthesis and conversions of certain oxindole derivatives of 1,3-diazaadamantane and 3,7-diazabicyclo[3.3.1]nonane
AU Agadzhanyan, Ts. E.; Gevorkyan, K. A.
CS A. L. Mndzhoyan Institute of Fine Organic Chemistry, Academy of Sciences of the Republic of Armenia, Yerevan, 375014, Armenia
SO Chem. Heterocycl. Compd. (N. Y.) (1998), Volume Date 1997, 33(11), 1288-1291
CODEN: CHCCAL; ISSN: 0009-3122
PB Consultants Bureau
DT Journal
LA English
AB By the reaction of 1,5-dimethyl-9-oxo-3,7-diazabicyclo[3.3.1]nonane with isatin and a no. of its derivs., spiro(1,3-diazaadamantane-2,3'-oxindoles) have been synthesized. In the case of 5-bromoisatin, either 3-(3-hydroxyoxindolyl)-3,7-diazabicyclo[3.3.1]nonane or the corresponding spirane is obtained, depending on the temp. The interaction of these products with acetic anhydride has been studied.
IT **80808-96-4**
RL: RCT (Reactant)
(reactions of diazabicyclononane with isatins)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)



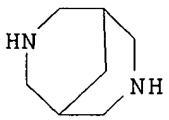
IT **147698-79-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(reactions of diazabicyclononane with isatins)
RN 147698-79-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-diacetyl-1,5-dimethyl- (9CI) (CA INDEX NAME)



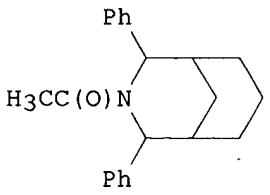
L13 ANSWER 21 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1998:314847 CAPLUS
DN 129:42327
TI Linked streptocyanine colorants
IN Kato, Takashi; Okazaki, Renji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10130516	A2	19980519	JP 1996-286272	19961029

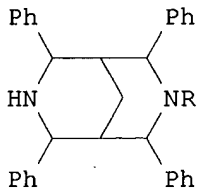
AB Two streptocyanine compds. are linked to show absorption being shifted in a region of shorter wavelength. Thus, 0.14 g N-(2,4-dinitrophenyl)pyridinium chloride was treated with 65 mg bispidine in MeOH/H2O and further treated with NaClO4 to give 23 mg bisstreptocyanine having .lambda.max 370 nm (.vepsiln. = 2.08 .times. 105; MeOH).
IT **280-74-0**, Bispidine
RL: RCT (Reactant)
(manuf. of bisstreptocyanine colorants having absorption at shorter wavelength)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



L13 ANSWER 22 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1998:53390 CAPLUS
DN 128:180115
TI Stereochemistry of N-acetyl-r-2,c-4-diphenyl-3-azabicyclo[3.3.1]nonanes and N-ethoxycarbonyl-r-2,c-4-diphenyl-3-azabicyclo[3.3.1]nonane
AU Jeyaraman, R.; Ponnuswamy, S.
CS Department of Chemistry, Bharathidasan University, Tiruchirapalli, 620 024, India
SO Indian J. Chem., Sect. B: Org. Chem. Incl. Med. Chem. (1997), 36B(9), 730-737
CODEN: IJSBDB; ISSN: 0376-4699
PB National Institute of Science Communication, CSIR
DT Journal
LA English
GI



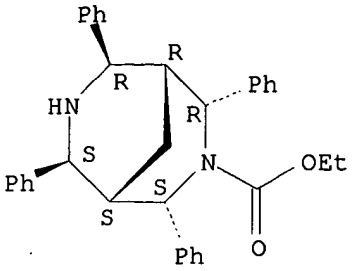
I



II

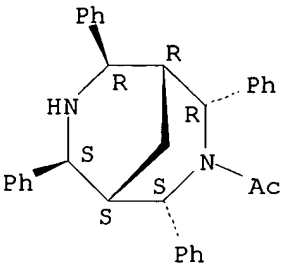
AB The conformational preferences of N-acetyl-r-2,c-4-diphenyl-3-azabicyclo[3.3.1] nonane I and N-ethoxycarbonyl-and N-acetyl-r-2,c-4,t-6,t-8-tetraphenyl-3,7-diazabicyclo[3.3.1] nonanes II (R= CO2Et,COMe) have been studied using NMR spectral techniques. The azabicyclo[3.3.1]nonane I is found to prefer a twin-chair conformation with a slight flattening at the nitrogen end. In the case of diazabicycles II both the ethoxycarbonylation and acetylation reactions are found to take place only at the boat end of the parent amine and the preferred conformation of the products is found to be twin-chair with flattening at C1-C2-N3-C4-C5 part of the ring in both cases. The energy barrier for the N-CO rotation in N-ethoxycarbonyl deriv. 6 has been detd. from the dynamic 1H NMR studies and the barrier for N- CO rotation is found to be 50.8 kJ mol-1, much less than that of N-nitroso analogs.
IT **203190-52-7P**, N-(Ethoxycarbonyl)-r-2,c-4-diphenyl-3-azabicyclo[3.3.1]nonane **203190-53-8P**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(dynamic NMR conformational anal. of ethoxycarbonyl-and acetyltetraphenyldiazabicyclononanes)
RN 203190-52-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 2,4,6,8-tetraphenyl-, ethyl ester, (2R,4S,6S,8R)-rel-[partial]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



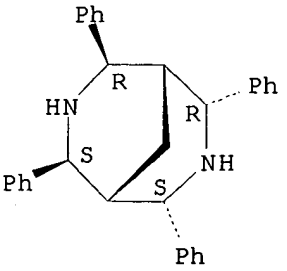
RN 203190-53-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-acetyl-2,4,6,8-tetraphenyl-, (2R,4S,6S,8R)-rel-[partial]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

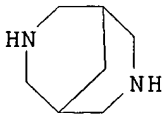


IT **75541-42-3**
RL: RCT (Reactant)
(starting material; prepn. of ethoxycarbonyldiphenylazabicyclononane)
RN 75541-42-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetraphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

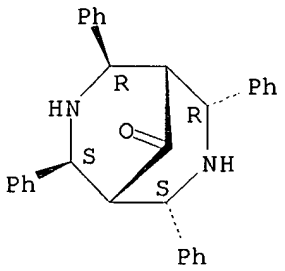


L13 ANSWER 23 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1997:597560 CAPLUS
DN 127:308422
TI Linear and Stack Oligostreptocyanines. Effects of Relative Orientation of Chromophores on Redox Potentials of Dye Aggregates
AU Katoh, Takashi; Inagaki, Yoshio; Okazaki, Renji
CS Fuji Photo Film Co., Ltd., 210 Nakanuma, Minami-ashigara, Kanagawa, 250-01, Japan
SO Bull. Chem. Soc. Jpn. (1997), 70(9), 2279-2286
CODEN: BCSJA8; ISSN: 0009-2673
PB Chemical Society of Japan
DT Journal
LA English
AB Linear and stack pentamethinestreptocyanine oligomers were prepd. in which streptocyanines are covalently connected to each other. The absorption bands of the linear oligomers showed bathochromic shifts compared to that of the corresponding monomer, while the absorption band of the stack dimer was hypsochromically shifted. These spectral shifts were reproduced by a calcn. with the INDO/S-CI method and are in agreement with those based upon a mol. exciton theory. The redox potentials of the linear oligomers underwent a pos. shift due to the Coulombic interaction compared to those of the streptocyanine monomer. The pos. shift of the redn. potential and the neg. shift of the oxidn. potential of the stack dimer are explained in terms of the Coulombic and orbital interactions.
IT **280-74-0**, Bispidine
RL: RCT (Reactant)
(synthesis of stack dimer; effects of relative chromophore orientation on redox potentials of linear and stack streptocyanine dye dimers and trimers)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



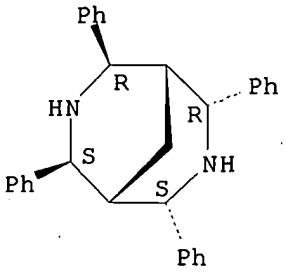
L13 ANSWER 24 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1997:491283 CAPLUS
DN 127:81001
TI Conformation and Stereodynamics of N,N'-Dinitroso-2,4,6,8-tetraaryl-3,7-diazabicyclo[3.3.1]nonanes
AU Gdaniec, Maria; Pham, Marzena; Polonski, Tadeusz
CS Faculty of Chemistry, A. Mickiewicz University, Poznan, 60-780, Pol.
SO J. Org. Chem. (1997), 62(16), 5619-5622
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 127:81001
AB The mol. mechanics calcns., X-ray crystallog., and 1H NMR consistently have shown that N,N'-dinitrosation of 2,4,6,8-tetraaryl-3,7-diazabicyclo[3.3.1]nonanes changes their conformation from a chair-boat to a twin-chain one with two aryl groups occupying axial positions and remaining two equatorial ones. The strong allylic A(1,3) strain, caused by interaction of the NNO group with the neighboring equatorial aryl substituents, leads to a pyramidalization of the amino nitrogen and a significant deviation of the corresponding nitrosamine group from planarity, whereas the second nitrosamine group remains essentially planar. The variable temp. NMR measurements have revealed two different barriers to the N-N rotation in the title compds.
IT **65732-77-6 75541-42-3 75549-52-9**
191345-76-3
RL: RCT (Reactant)
(conformation and stereodynamics of N,N'-dinitroso-2,4,6,8-tetraaryl-3,7-diazabicyclo[3.3.1]nonanes)
RN 65732-77-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



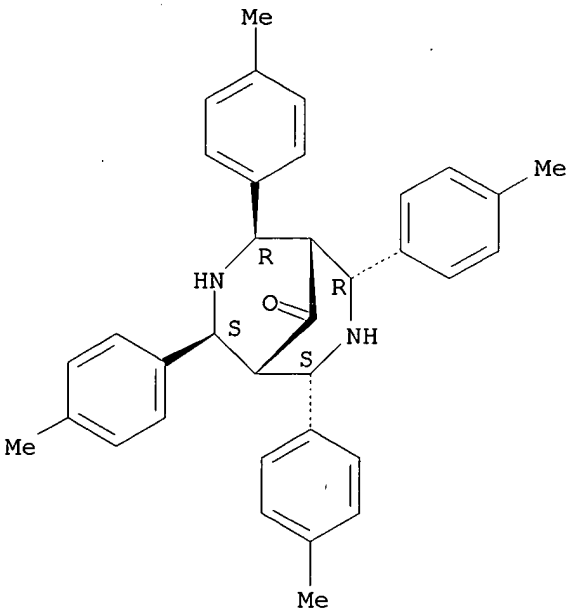
RN 75541-42-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetraphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



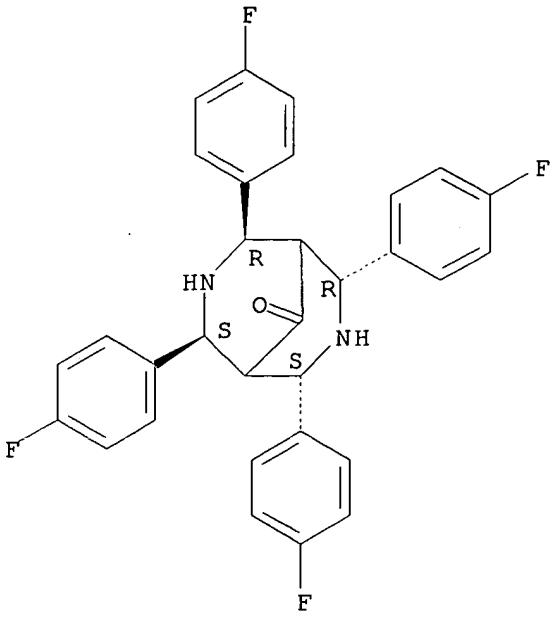
RN 75549-52-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 191345-76-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-fluorophenyl)-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.


F
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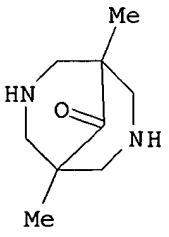
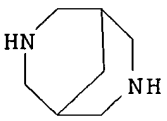
F

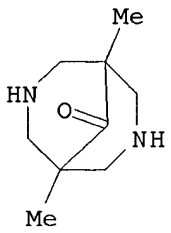
L13 ANSWER 25 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1997:172468 CAPLUS
DN 126:199654
TI (.pi.-Allyl)palladium Complexes with N,N'-Diphenylbispidinone Derivatives as a New Type of Chelating Nitrogen Ligand: Complexation Studies, Spectroscopic Properties, and an X-ray Structure of (3,7-Diphenyl-1,5-dimethylbispidinone)[(1,3-.eta.3-propenyl)-palladium] Trifluoromethanesulfonate
AU Gogoll, Adolf; Grennberg, Helena; Axen, Andreas
CS Department of Organic Chemistry, University of Uppsala, Uppsala, 751 21, Swed.
SO Organometallics (1997), 16(6), 1167-1178
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
OS CASREACT 126:199654
AB A series of 3,7-diazabicyclo[3.3.1]nonane (bispidine) derivs. have been synthesized, and their properties as bidentate nitrogen ligands for (.pi.-allyl)palladium complexes have been investigated. Complexes of these ligands and of N,N'-diphenylpiperazine and N,N'-diphenyl-1,4-diazacyclooctane with (1,3-.eta.3-propenyl)palladium are described, in particular their effects on the proton chem. shifts of the .pi.-allyl ligand. Ligand dynamics of the complexes is discussed. The structure of [(3,7-diphenyl-1,5-dimethylbispidinone)(1,3-.eta.3-propenyl)Pd]CF3SO3 has been detd. by x-ray crystallog. N,N'-Diphenylbispidine derivs. show an unusually large steric interaction with the .pi.-allyl ligand, indicated by a tilt of the .pi.-allyl plane toward the N-Pd-N plane by 122.8(8).degree.. Chem. shift changes of the .pi.-allyl protons due to the arom. ring current are related to the geometry of the complexes. The ligands are tested on the larger 2-methylene-6,6-dimethylbicyclo[3.1.1]hept-2,3,10-.eta.3-enyl ligand, demonstrating their potential as chem. shift reagents.
IT **80808-96-4P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of allylpalladium complexes with diphenylbispidinone derivs. as new type of chelating nitrogen ligand and their complexation studies and spectroscopic properties)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)



L13 ANSWER 26 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1997:135687 CAPLUS
DN 126:219919
TI The design of a new type of very rigid tetradentate ligand
AU Comba, Peter; Nuber, Bernhard; Ramlow, Anne
CS Anorg.-Chem. Inst. Univ., Heidelberg, 69120, Germany
SO J. Chem. Soc., Dalton Trans. (1997), (3), 347-352
CODEN: JCDTBI; ISSN: 0300-9246
PB Royal Society of Chemistry
DT Journal
LA English
AB Mol. mechanics calcns. were used to compute the structural properties of a new type of very rigid tetradentate ligand for tetrahedral coordination geometries. The calcns. indicate that the pendant arms of the disubstituted bispidine (3,7-diazabicyclo[3.3.1]nonane) backbone need to form six-membered chelate rings with the metal to allow a distorted tetrahedral geometry. Smaller rings lead to five-(trigonal bipyramidal) or six-coordinate (octahedral) transition-metal compds. The quality of these predictions is supported by the exptl. detd. structure of a Co(II) compd. of the ligand with coordinated pyridine substituents (five-membered chelate rings) and an addnl. bidentate nitrate ligand. Comparison of the computed structures with the crystal structure of the Co(II) compd. and with that of a ligand with Me-protected Ph substituents supports the rigidity of the bispidine backbone and indicates that rotation of coordinating side chains around a C-C single bond is the only flexibility in these ligands.
IT **280-74-0D**, 3,7-Diazabicyclo[3.3.1]nonane, derivs. with pendant arms, cobalt complexes
RL: PRP (Properties)
(mol. mechanics calcns. of structural properties of very rigid tetradentate ligand in cobalt complex)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)

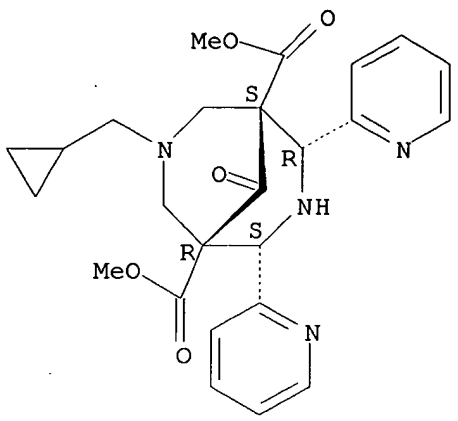


L18 ANSWER 27 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1997:57952 CAPLUS
DN 126:185747
TI Chemical shift assignment of geminal protons in 3,7-diazabicyclo[3.3.1]nonanes: an unexpected deviation from the axial/equatorial chemical shift order
AU Gogoll, Adolf; Grennberg, Helena; Axen, Andreas
CS Department of Organic Chemistry, University of Uppsala, Uppsala, 751 21, Swed.
SO Magn. Reson. Chem. (1997), 35(1), 13-20
CODEN: MRCHEG; ISSN: 0749-1581
PB Wiley
DT Journal
LA English
AB The chem. shift order of axial and equatorial methylene protons in 1,5-disubstituted 3,7-diazabicyclo [3.3.1] nonan-9-ones may be altered by substituents in the 1,5-positions, but the corresponding alcs. behave differently. Unambiguous signal assignments for a series of the title compds. are provided, based on 3JCH coupling consts. and on {1H} 13C heteronuclear Overhauser effects. Substituent anisotropy effects as a source of the chem. shift changes are discussed.
IT **80808-96-4**
RL: PRP (Properties)
(deviation from axial/equatorial chem. shift order and chem. shift assignment of geminal protons in 3,7-diazabicyclo[3.3.1]nonanes)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)

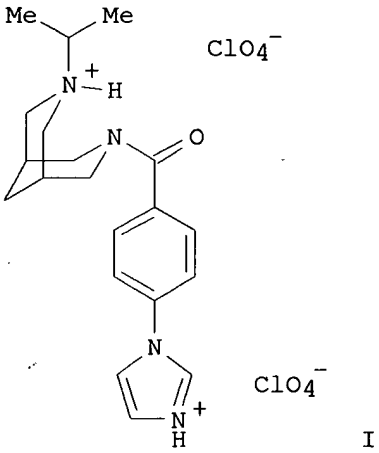


L18 ANSWER 28 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1996:411968 CAPLUS
DN 125:104282
TI Search for the pharmacophore in kappa-agonistic diazabicyclo[3.3.1]nonan-9-one-1,5-diesters and arylacetamides
AU Brandt, Wolfgang; Drosihn, Susanne; Haurand, Michael; Holzgrabe, Ulrike; Nachtsheim, Corina
CS Pharm. Inst., Univ. bonn, Bonn, 53115, Germany
SO Arch. Pharm. (Weinheim, Ger.) (1996), 329(6), 311-323
CODEN: ARPMAS; ISSN: 0365-6233
DT Journal
LA English
AB Several heterocyclic bicyclo[3.3.1]nonan-9-ones were found to have a high affinity to .kappa. opioid receptors. 3,7-Diazabicyclononanones with 2,4-dipyridyl side chains were the most potent agonists whereas the corresponding 3-oxa-7-azabicyclo[3.3.1]nonan-9-one and compds. with Ph substituents in 2 and 4 position are almost inactive. The purpose of this study was to unravel the active conformation of the bicyclononanones using well-known .kappa.-selective agonists such as ketocyclacocine, arylacetamides, several isoquinolines, CI-977, and four stereoisomers of EMD-61753 for comparison. In order to det. the geometry of the diazabicycles in soln. pH-dependent NMR measurements of the bicycles were recorded and the results were related to the geometries of the aforementioned .kappa. agonists obtained from semiempirical PM3 calcns. A chair-boat conformation and a protonation at the N7 nitrogen atom of the diazabicyclononanones were found to be the pharmacophoric conformation. Comparison of the spatial arrangements, electrostatic, hydrophobic, and hydrogen bonding potentials of all .kappa.-selective agonists led to a model of structure-activity relationships of ligands of the .kappa. receptor. The arrangement of the pharmacophoric elements is characterized by an almost parallel orientation of a carbonyl and a protonated NH function in conjunction with at least one arom. ring. Ketocyclazocine is only able to adopt this parallel orientation when the nitrogen is inverted relative to the x-ray structure. Furthermore, two binding sites for the arom. rings are discussed. The pharmacol. results of all considered bicyclononanone derivs. as well as of the four enantiomers of EMD-61753 can be understood and consistently explained in this way.
IT **124189-56-6**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacophore in .kappa.-agonistic diazabicyclo[3.3.1]nonan-9-one-1,5-diesters and arylacetamides)
RN 124189-56-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 7-(cyclopropylmethyl)-9-oxo-2,4-di-2-pyridinyl-, dimethyl ester, (endo,endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.


MeO
O
S
N
R
N
O
NH
S
R
MeO
O
N

L13 ANSWER 29 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1996:326442 CAPLUS
DN 125:86610
TI Novel 3,7-Diheterabicyclo[3.3.1]nonanes That Possess Predominant Class III Antiarrhythmic Activity in 1-4 Day Post Infarction Dog Models: X-ray Diffraction Analysis of 3-[4-(1H-Imidazol-1-yl)benzoyl]-7-isopropyl-3,7-diazabicyclo[3.3.1]nonane Dihydroperchlorate
AU Garrison, Gregory L.; Berlin, K. Darrell; Scherlag, Benjamin J.; Lazzara, Ralph; Patterson, Eugene; Fazekas, Tamas; Sangiah, Subbiah; Chen, Chun-Lin; Schubot, F. D.; van der Helm, Dick
CS Department of Chemistry, Oklahoma State University, Stillwater, OK, 74078, USA
SO J. Med. Chem. (1996), 39(13), 2559-2570
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI

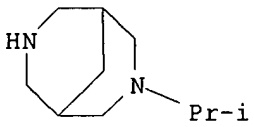


I

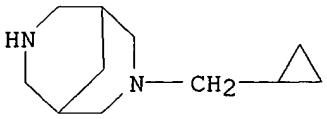
AB Several 3,7-diheterabicyclo[3.3.1]nonanes were prepd. and screened in the Harris dog model for their ability to abolish pace-induced and sustained ventricular tachycardia (SVT) or prevent induction of ventricular tachycardia. In addn., an electrophysiol. examn. was made in the infarcted hearts of each animal to det. if more than one class activity was present. The examples exhibited predominately class III antiarrhythmic activity via a prolongation of the ventricular effective refractory period (VERP) in the models, although there may well be an underlying class Ib action present as exemplified by the ability of several of the agents to slow conduction in the myocardial infarcted dog hearts. 3-[4-(1H-Imidazol-1-yl)benzoyl]-7-isopropyl-3,7-diazabicyclo[3.3.1]nonane dihydroperchlorate (I) displayed powerful class III activity in the model systems while several other 3,7-diheterabicyclo[3.3.1]nonanes exhibited various degrees of class III action. An X-ray diffraction anal. revealed that this compd. had a 3,7-diazabicyclo[3.3.1]nonane bicyclic unit in a chair-chair conformation.
IT **129039-76-5**
RL: RCT (Reactant)
(prepn. and antiarrythmic activity of 3,7-diazabicyclo[3.3.1]nonanes)
RN 129039-76-5 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)- (9CI) (CA INDEX NAME)

Provisō



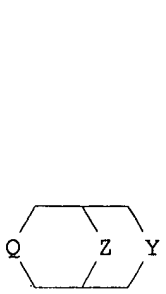
IT **173973-38-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antiarrythmic activity of 3,7-diazabicyclo[3.3.1]nonanes)
RN 173973-38-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(cyclopropylmethyl)- (9CI) (CA INDEX NAME)



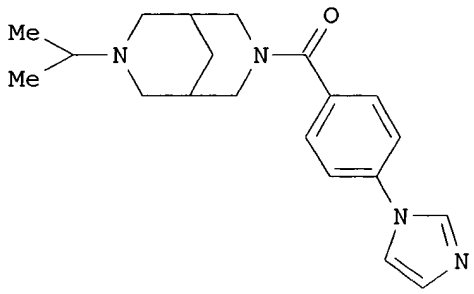
L13 ANSWER 30 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:1006741 CAPLUS
DN 124:176165
TI N-alkyl and N-acyl derivatives of 3,7-diazabicyclo[3.3.1]nonanes and selected salts thereof as multi-class antiarrhythmic agents
IN Berlin, Kenneth D.; Garrison, Gregory L.; Sangiah, Subbiah; Clarke, Cyril R.; Chen, Chun Lin; Lazzara, Ralph; Scherlag, Benjamin J.; Patterson, Eugene S.; Burrows, George E.
PA Oklahoma State University, USA
SO U.S., 20 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5468858	A	19951121	US 1993-144639	19931028
	US 5786481	A	19980728	US 1995-545341	19951019
PRAI	US 1993-144639		19931028		

OS MARPAT 124:176165
GI



I



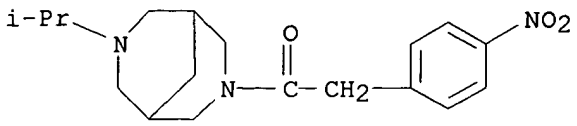
II

AB A variety of 3,7-diazabicyclo[3.3.1]nonanes and selected derivs. are disclosed as multi-class antiarrhythmic agents and intermediates thereof. Claimed compds. include I [Q = RN where R = iso-Pr or cyclopropylmethyl; Z = CH2; Y = ArCON where Ar = (un)substituted aryl] and their hydrochloride, hydroperchlorate, fumarate, and other salts. For example, 3-isopropyl-3,7-diazabicyclo[3.3.1]nonane underwent N-acylation with 4-FC6H4COCl, and the product fluoride was condensed with imidazole in the presence of K2CO3 and 18-crown-6, to give title compd. II, isolated as the dihydroperchlorate. At 3-6 mg/kg in dogs with myocardial infarctions and induced ventricular tachycardia, II increased ventricular effective refractory period, prolonged QT by 30%, lowered heart rate by 20-40 beats/min, and prevented sustained ventricular tachycardia (Class I and III activity).

IT **173973-46-1P**
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-alkyl and N-acyl diazabicyclononane derivs. as multi-class antiarrhythmics)

RN 173973-46-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)-7-[(4-nitrophenyl)acetyl]-

(9CI) (CA INDEX NAME)

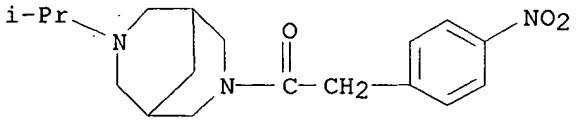


IT **173973-47-2P 173973-48-3P 173973-49-4P**
173973-50-7P 173973-51-8P 173973-52-9P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-alkyl and N-acyl diazabicyclononane derivs. as multi-class antiarrhythmics)

RN 173973-47-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)-7-[(4-nitrophenyl)acetyl]-, monoperchlorate (9CI) (CA INDEX NAME)

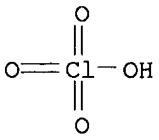
CM 1

CRN 173973-46-1
CMF C18 H25 N3 O3

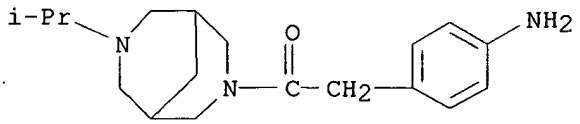


CM 2

CRN 7601-90-3
CMF Cl H O4

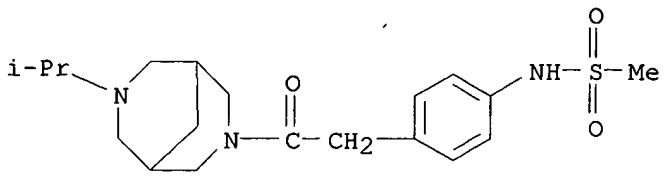


RN 173973-48-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[(4-aminophenyl)acetyl]-7-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 173973-49-4 CAPLUS

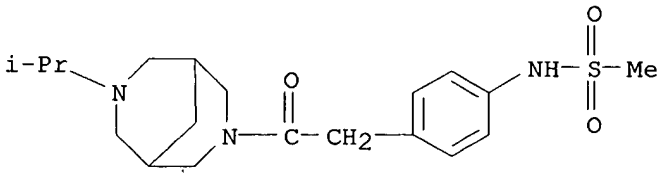
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)-7-[[4-[(methylsulfonyl)amino]phenyl]acetyl]- (9CI) (CA INDEX NAME)



RN 173973-50-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)-7-[[4-[(methylsulfonyl)amino]phenyl]acetyl]-, monoperchlorate (9CI) (CA INDEX NAME)

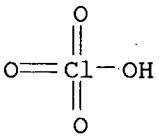
CM 1

CRN 173973-49-4
CMF C19 H29 N3 O3 S

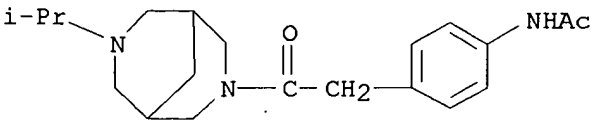


CM 2

CRN 7601-90-3
CMF Cl H O4



RN 173973-51-8 CAPLUS
CN Acetamide, N-[4-[2-[7-(1-methylethyl)-3,7-diazabicyclo[3.3.1]non-3-yl]-2-oxoethyl]phenyl]- (9CI) (CA INDEX NAME)

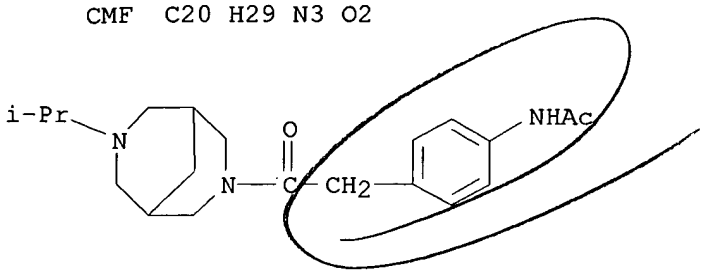


RN 173973-52-9 CAPLUS
CN Acetamide, N-[4-[2-[7-(1-methylethyl)-3,7-diazabicyclo[3.3.1]non-3-yl]-2-

oxoethyl]phenyl]-, monoperchlorate (9CI) (CA INDEX NAME)

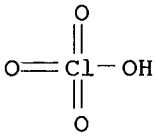
CM 1

CRN 173973-51-8
CMF C20 H29 N3 O2

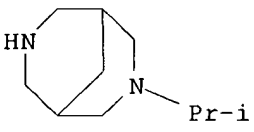


CM 2

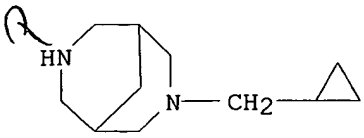
CRN 7601-90-3
CMF Cl H O4



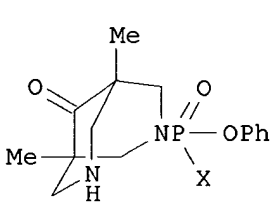
IT **129039-76-5,** 3-Isopropyl-3,7-diazabicyclo[3.3.1]nonane
RL: RCT (Reactant)
(starting material; prepn. of N-alkyl and N-acyl diazabicyclononane derivs. as multi-class antiarrhythmics)
RN 129039-76-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)- (9CI) (CA INDEX NAME)



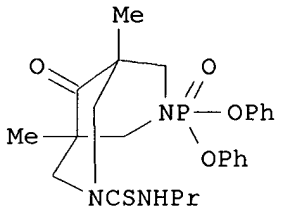
IT **173973-38-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(starting material; prepn. of N-alkyl and N-acyl diazabicyclononane derivs. as multi-class antiarrhythmics)
RN 173973-38-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(cyclopropylmethyl)- (9CI) (CA INDEX NAME)



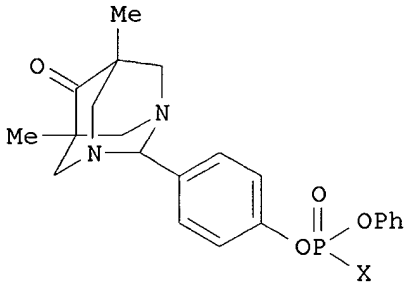
L13 ANSWER 31 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:904877 CAPLUS
DN 124:117427
TI Synthesis and transformations of polyhedral compounds. 21. Synthesis and antitumor properties of derivatives of 1,3-diaza-2-phosphaadamantane, phosphoryl-containing 3,7-diazabicyclo[3.3.1]nonane, and 1,3-diazaadamantane
AU Arutyunyan, G. L.; Chachoyan, A. A.; Shkulev, V. A.; Adamyan, G. G.; Agadzhanyan, Ts. E.; Garibdzhanyan, B. T.
CS Inst. Tonkoi Org. Khim., Yerevan, Armenia
SO Khim.-Farm. Zh. (1995), 29(3), 33-5
CODEN: KHFZAN; ISSN: 0023-1134
DT Journal
LA Russian
OS CASREACT 124:117427
GI



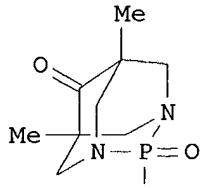
I



II



III

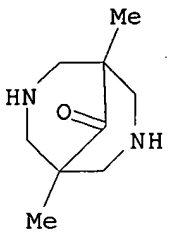


IV

AB Title compds., e.g., I [X = OPh, N(CH2CH2Cl)2], II, III (same X), and IV (same X) were prepd. from 1,5-dimethyl-9-oxo-3,7-diazabicyclo[3.3.1]nonane and 5,7-dimethyl-6-oxo-1,3-diazaadamantanes and tested for antitumor activity. Derivs. of 1,3-diaza-2-phosphaadamantane are significantly more active than derivs. of 3,7-diazabicyclo[3.3.1]nonane or 1,3-diazaadamantane.

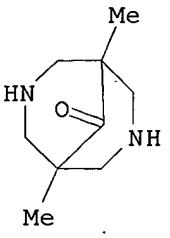
IT **172882-04-1**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(prepn. and antitumor activity of diazaphosphaadamantane derivs. and phosphoryl-contg. derivs. of diazabicyclononane and diazaadamantane)

RN 172882-04-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



2 HCl

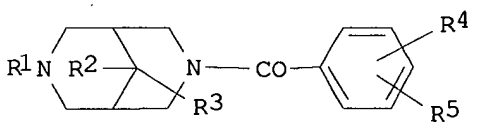
IT **80808-96-4**
RL: RCT (Reactant)
(prepn. and antitumor activity of diazaphosphaadamantane derivs. and phosphoryl-contg. derivs. of diazabicyclononane and diazaadamantane)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)



L13 ANSWER 32 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:785013 CAPLUS
DN 123:188602
TI Antiarrhythmic 3-benzoyl-3,7-diazabicyclo[3.3.1]nonanes
IN Schoen, Uwe; Brueckner, Reinhard; Meil, Joerg; Thormaehlen, Dirk
PA Kali-Chemie Pharma GmbH, Germany
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 665014	A1	19950802	EP 1995-100953	19950125
	EP 665014	B1	19970903		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	DE 4402933	A1	19950803	DE 1994-4402933	19940201
	IL 112344	A1	19970610	IL 1995-112344	19950116
	CN 1110556	A	19951025	CN 1995-101603	19950125
	AT 157539	E	19970915	AT 1995-100953	19950125
	ES 2108497	T3	19971216	ES 1995-100953	19950125
	HU 70173	A2	19950928	HU 1995-263	19950127
	CA 2141367	AA	19950802	CA 1995-2141367	19950130
	AU 9511468	A1	19950810	AU 1995-11468	19950130
	ZA 9500698	A	19960207	ZA 1995-698	19950130
	NO 9500361	A	19950802	NO 1995-361	19950131
	FI 9500423	A	19950802	FI 1995-423	19950131
	JP 07252152	A2	19951003	JP 1995-14209	19950131
	US 5532251	A	19960702	US 1995-382265	19950201
PRAI	DE 1994-4402933		19940201		

OS MARPAT 123:188602
GI



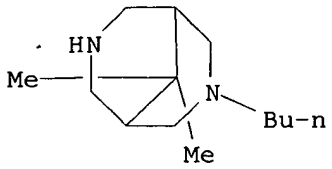
I

AB The title compds. (I; R1 = C1-6 alkyl, C4-7 cycloalkylalkyl; R2, R3 = lower alkyl, or R2R3 = C3-6 alkylene; R5 = H, halo, CF3, NO2; R4 = R5, CN, R6SO2; R6 = F, lower alkyl) and their acid addn. salts are useful for treatment of arrhythmia in humans and large mammals. Thus, I [R1 = Bu, R2R3 = (CH2)4, R4 = 4-chloro, R5 = H] (II) (2 .mu.mol/kg i.v.) prolonged the effective refractory time in guinea pigs with exptl. tachycardia by 15% and had a min. oral toxic dose of >300 mg/kg in mice. Tablets were prepd. contg. II-HCl 20, corn starch 30, lactose 55, PVP-25 5, Mg stearate 2, and talc 3 parts. II was prepd. by condensation of 7-butyl-9,9-tetramethylene-3,7-diazabicyclo[3.3.1]nonane with 4-chlorobenzoyl chloride.

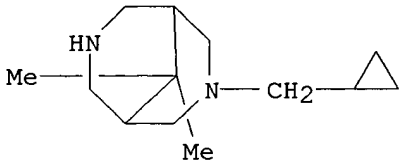
IT **120466-42-4 122032-37-5 167553-37-9**
167553-42-6
RL: RCT (Reactant)
(antiarrhythmic benzoyldiazabicyclononanes)

RN 120466-42-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9,9-dimethyl- (9CI) (CA INDEX

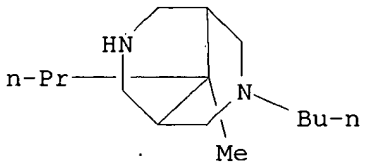
NAME)



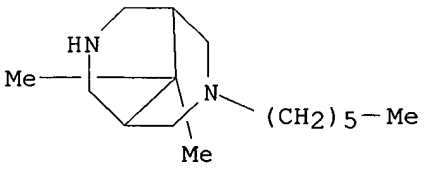
RN 122032-37-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(cyclopropylmethyl)-9,9-dimethyl- (9CI) (CA INDEX NAME)



RN 167553-37-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9-methyl-9-propyl- (9CI) (CA INDEX NAME)



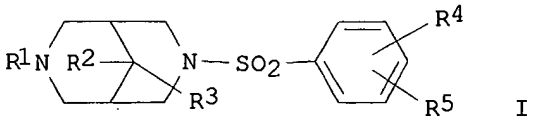
RN 167553-42-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-hexyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



L13 ANSWER 33 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:785009 CAPLUS
DN 123:188601
TI Antiarrhythmic 3-phenylsulfonyl-3,7-diazabicyclo[3.3.1]nonanes
IN Schoen, Uwe; Farjam, Arman; Brueckner, Reinhard; Ziegler, Dieter
PA Kali-Chemie Pharma GmbH, Germany
SO Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 665228	A1	19950802	EP 1995-100954	19950125
	EP 665228	B1	19990714		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	DE 4402931	A1	19950803	DE 1994-4402931	19940201
	IL 112364	A1	19980104	IL 1995-112364	19950117
	CN 1111631	A	19951115	CN 1995-101498	19950125
	AT 182149	E	19990715	AT 1995-100954	19950125
	ES 2133593	T3	19990916	ES 1995-100954	19950125
	HU 70174	A2	19950928	HU 1995-262	19950127
	CA 2141366	AA	19950802	CA 1995-2141366	19950130
	AU 9511564	A1	19950810	AU 1995-11564	19950130
	ZA 9500697	A	19960207	ZA 1995-697	19950130
	PL 180075	B1	20001229	PL 1995-307000	19950130
	FI 9500422	A	19950802	FI 1995-422	19950131
	NO 9500360	A	19950802	NO 1995-360	19950131
	JP 07267954	A2	19951017	JP 1995-14204	19950131
	US 5576327	A	19961119	US 1995-382262	19950201
	US 5635511	A	19970603	US 1996-594946	19960131
PRAI	DE 1994-4402931	A	19940201		
	US 1995-382262	A3	19950201		

OS MARPAT 123:188601
GI

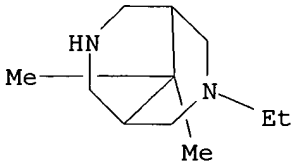


I

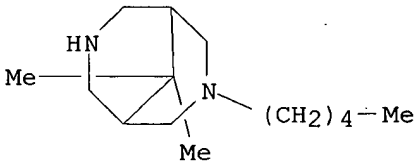
AB The title compds. (I; R1 = C1-6 alkyl, C4-7 cycloalkylalkyl; R2, R3 = lower alkyl, or R2R3 = C3-6 alkylene; R4 = halo, NO2, CF3, CN, alkoxycarbonyl, alkanesulfonamido, carboxamido; R5 = H, halo) are useful for treatment of cardiac arrhythmia in humans and large mammals. Thus, I (R1 = Bu, R2 = R3 = Me, R4 = 4-CN, R5 = H) (II) (1 .mu.mol/kg i.v.) prolonged the effective refractory time by 15% in guinea pigs with exptl. tachycardia, and had a min. oral toxic dose >300 mg/kg in mice. II-HCl was prepd. by condensation of 7-butyl-9,9-dimethyl-3,7-diazabicyclo[3.3.1]nonane with 4-cyanobenzenesulfonyl chloride. Tablets were prepd. contg. II-HCl 20, corn starch 69, lactose 135, gelatin (as 10% soln.) 6, talc 5, and Mg stearate 5 mg.

IT **120466-43-5 120466-44-6 122032-35-3**
122032-36-4 167553-37-9 167553-38-0
167553-39-1 167553-40-4 167553-41-5

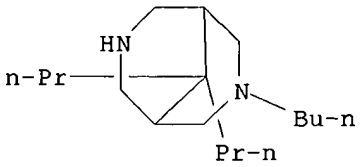
167553-42-6
RL: RCT (Reactant)
(antiarrhythmic phenylsulfonyldiazabicyclononanes)
RN 120466-43-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-ethyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



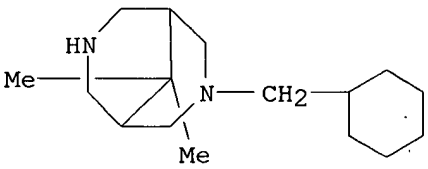
RN 120466-44-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-pentyl- (9CI) (CA INDEX NAME)



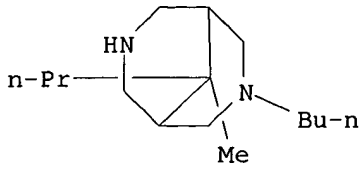
RN 122032-35-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9,9-dipropyl- (9CI) (CA INDEX NAME)



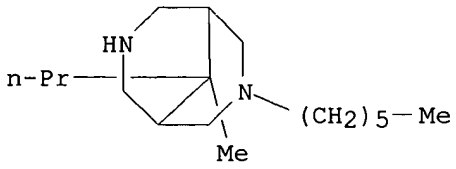
RN 122032-36-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(cyclohexylmethyl)-9,9-dimethyl- (9CI) (CA INDEX NAME)



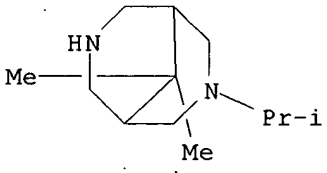
RN 167553-37-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9-methyl-9-propyl- (9CI) (CA INDEX NAME)



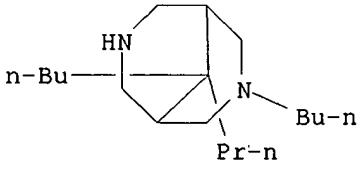
RN 167553-38-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-hexyl-9-methyl-9-propyl- (9CI) (CA INDEX NAME)



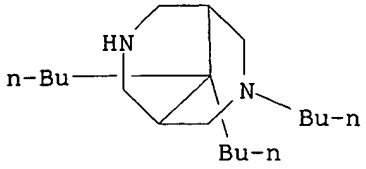
RN 167553-39-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-(1-methylethyl)- (9CI) (CA INDEX NAME)



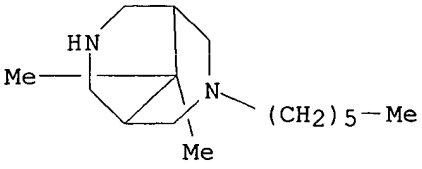
RN 167553-40-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3,9-dibutyl-9-propyl- (9CI) (CA INDEX NAME)



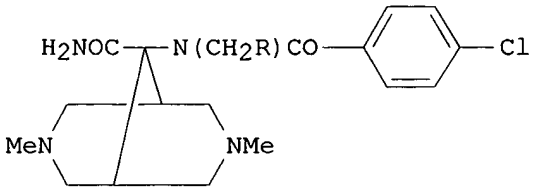
RN 167553-41-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3,9,9-tributyl- (9CI) (CA INDEX NAME)



RN 167553-42-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-hexyl-9,9-dimethyl- (9CI) (CA INDEX NAME)

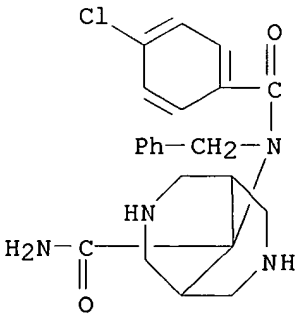


L13 ANSWER 34 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:628110 CAPLUS
DN 123:228145
TI Structural, conformational, theoretical and pharmacological study of some amides derived from 3,7-dimethyl-9-(N-substituted 4-chlorobenzamido)-3,7-diazabicyclo[3.3.1]nonane-9-carboxamide
AU Fernandez, M. J.; Toledano, M. S.; Galvez, E.; Orjales, A.; Berisa, A.; Labeaga, L.; Fonseca, I.; Sanz-Aparicio, J.; Bellanato, J.
CS Departamento de Quimica Organica, Universidad de Alcala, 28871 Alcala de Henares, Madrid, Spain
SO J. Mol. Struct. (1995), 351, 137-46
CODEN: JMOSB4; ISSN: 0022-2860
DT Journal
LA English
GI



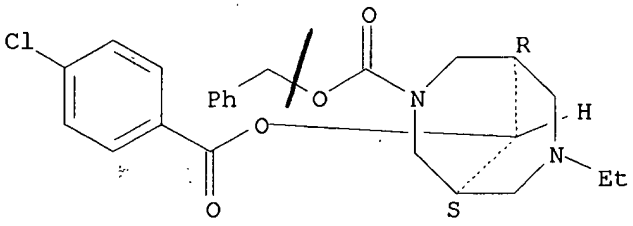
I

AB The title compds. (I; R = benzyl, Ph, 4-fluorophenyl) were prepd. and studied by IR, Raman, and 1H and 13C NMR spectroscopy and by mol. modeling techniques. The crystal structure of I (R = Ph) was detd. by x-ray diffraction. In CDCl3 and CD3OD solns., I adopt a nondistorted chair-chair conformation with the N-substituents in an equatorial position. I (R = Ph) prevented acetic acid-induced writhing in mice.
IT **168279-06-9**
RL: PRP (Properties)
(mol. modeling of)
RN 168279-06-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-9-carboxamide, 9-[(4-chlorobenzoyl)(phenylmethyl)amino]- (9CI) (CA INDEX NAME)



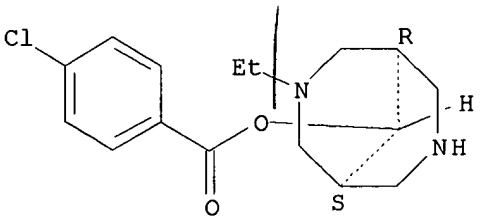
L18 ANSWER 35 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:441037 CAPLUS
DN 123:111879
TI Synthesis and biological activity of the metabolites of syn-3-ethyl-7-methyl-3,7-diazabicyclo[3.3.1]non-9-yl 4-chlorobenzoate hydrochloride
AU Yamawaki, Ichiro; Bukovac, Scott W.; Sunami, Akihiko
CS Tokushima Res. Cent., Pharmacokinetics Res. Lab. and Pharmacol. Res. Lab., Tokushima, 771-01, Japan
SO Chem. Pharm. Bull. (1994), 42(11), 2365-9
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
OS CASREACT 123:111879
AB Five metabolites of syn-3-ethyl-7-methyl-3,7-diazabicyclo[3.3.1]non-9-yl 4-chlorobenzoate hydrochloride (YUTAC) were prepd. and examd. for Na+ current blocking activity in guinea pig ventricular myocytes. These metabolites showed lower inhibitory activities than the parent compd. or were inactive.
IT **166272-89-5P 166272-90-8P 166272-91-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and Na+ current blocking activity of the metabolites of Yutac)
RN 166272-89-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxylic acid, 9-[(4-chlorobenzoyl)oxy]-7-ethyl-, phenylmethyl ester, syn- (9CI) (CA INDEX NAME)

Relative stereochemistry.



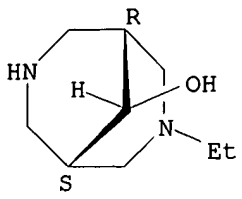
RN 166272-90-8 CAPLUS
CN Benzoic acid, 4-chloro-, 3-ethyl-3,7-diazabicyclo[3.3.1]non-9-yl ester, syn- (9CI) (CA INDEX NAME)

Relative stereochemistry.

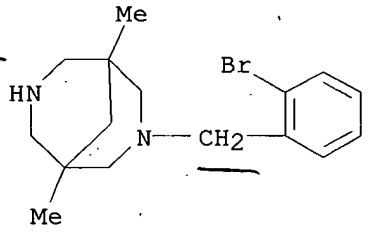


RN 166272-91-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 3-ethyl-, syn- (9CI) (CA INDEX NAME)

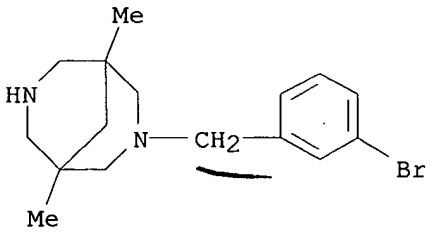
Relative stereochemistry.


R
HN
H
OH
N
Et
S

L13 ANSWER 36 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:376577 CAPLUS
DN 123:256562
TI Synthesis and transformations of polyhedral compounds. 20. Synthesis of some derivatives of 3,7-diazabicyclo[3.3.1]nonane
AU Minasyan, H. G.; Arutyunyan, A. D.; Adamyan, H. G.; Aghadrzhanyan, Ts. E.
CS Inst. Tonkoi Org. Khim. im. A.L. Mndzhoyana, Yerevan, Armenia
SO Khim. Geterotsikl. Soedin. (1994), (3), 401-6
CODEN: KGSSAQ; ISSN: 0132-6244
DT Journal
LA Russian
AB 1,3-Diazaadamantanes with CH2, CHOH, or C:NOH as position 6 reacted with aralkyl halides in aq. alk. media to give 3,7-diaralkyl-3,7-diazabicyclo[3.3.1]nonanes with the above groups as position 9. A similar reaction of quaternary salts of 1,3-diazaadamantanes was also described.
IT **169177-33-7P 169177-34-8P 169177-36-0P**
169177-37-1P 169177-38-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 169177-33-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[(2-bromophenyl)methyl]-1,5-dimethyl- (9CI) (CA INDEX NAME)



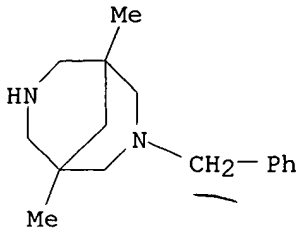
RN 169177-34-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[(3-bromophenyl)methyl]-1,5-dimethyl- (9CI) (CA INDEX NAME)



RN 169177-36-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 1,5-dimethyl-3-(phenylmethyl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

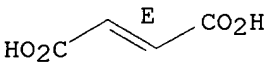
CRN 169177-19-9
CMF C16 H24 N2



CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

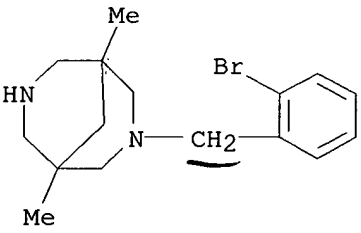
Double bond geometry as shown.



RN 169177-37-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[(2-bromophenyl)methyl]-1,5-dimethyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

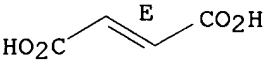
CRN 169177-33-7
CMF C16 H23 Br N2



CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.

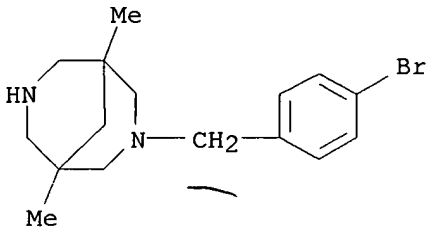


RN 169177-38-2 CAPLUS

CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[(4-bromophenyl)methyl]-1,5-dimethyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

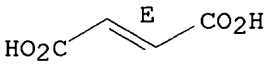
CRN 169177-22-4
CMF C16 H23 Br N2



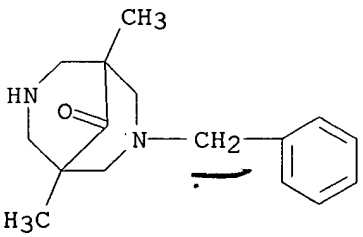
CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

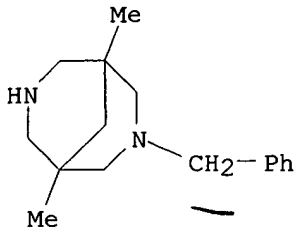
Double bond geometry as shown.



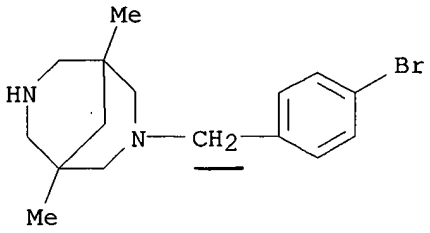
IT **107606-88-2**
RL: RCT (Reactant)
(prepn. of diazabicyclononanes from diazaadamantanes)
RN 107606-88-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



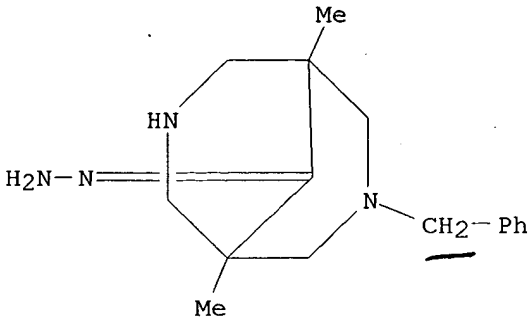
IT **169177-19-9P 169177-22-4P 169177-26-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of diazabicyclononanes from diazaadamantanes)
RN 169177-19-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 1,5-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



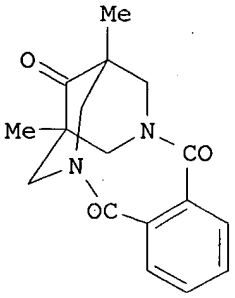
RN 169177-22-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[(4-bromophenyl)methyl]-1,5-dimethyl- (9CI) (CA INDEX NAME)



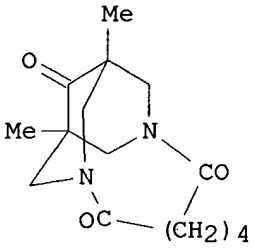
RN 169177-26-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3-(phenylmethyl)-, hydrazone (9CI) (CA INDEX NAME)



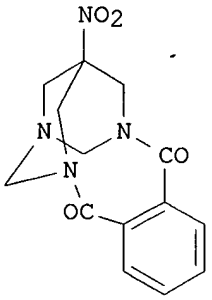
L13 ANSWER 37 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1995:376575 CAPLUS
DN 122:265351
TI Synthesis and transformations of polyhedral compounds. 18. Transformation of 1,3-diaza- and 1,3,5-triazaadamantanes into new nitrogen-containing polyhedral compounds by the action of dicarboxylic acid dichlorides
AU Aghadzhanyan, Ts. E.; Arutyunyan, G. L.; Adamyan, H. G.
CS Inst. Tonkoi Org. Khim. im. I.L. Mndzhoyana, Yerevan, Armenia
SO Khim. Geterotsikl. Soedin. (1994), (3), 393-6
CODEN: KGSSAQ; ISSN: 0132-6244
DT Journal
LA Russian
GI



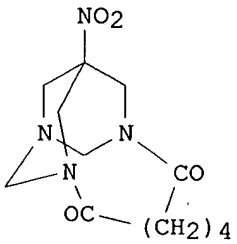
I



II

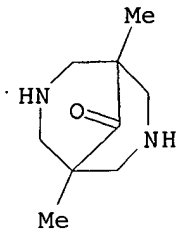


III



IV

AB Polyhedral compds. such as I, II, III, and IV were prepd. by reaction of di- and triazaadamantanes with phthaloyl and adipoyl chloride.
IT **80808-96-4**
RL: RCT (Reactant)
(nitrogen-contg. polyhedral compds. from diaza- and triazaadamantanes and dicarboxylic acid dichlorides)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)

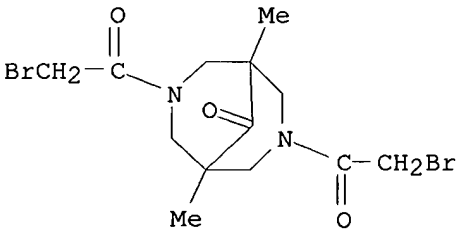

Me
HN
O
NH
Me

L13 ANSWER 38 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1994:700875 CAPLUS
DN 121:300875
TI Synthesis and transformations of polyhedric compounds. 17. Transformation of 1,3-diaza- and 1,3,5-triazaadamantanes to nitrogen-containing pentacyclic compounds
AU Minasyan, G. G.; Agadzhanyan, C. E.; Adamyan, G. G.
CS Inst. Tonk. Org. Khim., Yerevan, 375014, Armenia
SO Khim. Geterotsikl. Soedin. (1994), (1), 106-10
CODEN: KGSSAQ; ISSN: 0132-6244
DT Journal
LA Russian
GI

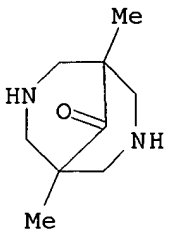
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Reaction of diazaadamantane I (R = R1 = H, Me; R = H, R1 = Et) with diazabicyclononane II at high diln. in presence of Et3N afforded tetraaza pentacyclic compd. III (46-53%). Reaction of I with triazabicyclononane IV afforded pentaaza pentacyclic compd. V (52%), and of triazaadamantane VI with IV afforded hexaaza pentacyclic compd. VII (59%).

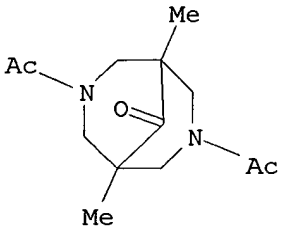
IT **80808-87-3**
RL: RCT (Reactant)
(cycloalkylation reactions of 1,3-diaza- and 1,3,5-triazaadamantanes in prepn. of nitrogen-contg. pentacyclic compds.)
RN 80808-87-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-bis(bromoacetyl)-1,5-dimethyl- (9CI) (CA INDEX NAME)



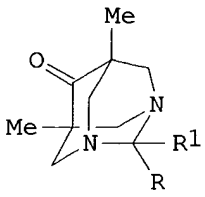
IT **80808-96-4P 147698-79-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(cycloalkylation reactions of 1,3-diaza- and 1,3,5-triazaadamantanes in prepn. of nitrogen-contg. pentacyclic compds.)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)



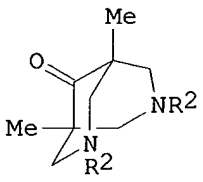
RN 147698-79-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-diacetyl-1,5-dimethyl- (9CI) (CA INDEX NAME)



L18 ANSWER 39 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1993:254788 CAPLUS
DN 118:254788
TI Synthesis and transformations of polyhedral compounds. 14. Opening of the hexahydropyrimidine ring of 2-substituted 1,3-diazaadamantanes by electrophilic reagents
AU Agadzanyan, Ts.; Arutynyan, A. D.; Arutynyan, G. L.
CS Inst. Tonkor Org. Khim., Yerevan, 375014, Armenia
SO Khim. Geterotsikl. Soedin. (1992), (7), 929-32
CODEN: KGSSAQ; ISSN: 0132-6244
DT Journal
LA Russian
OS CASREACT 118:254788
GI

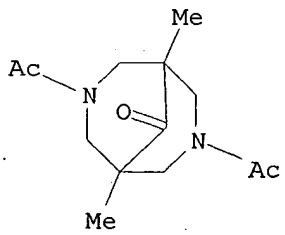


I

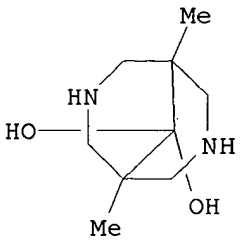


II

AB Reaction of diazaadamantanes I [R = H, R1 = Et, Ph, 3-pyridyl; R = R1 = H, Me; RR1 = (CH2)4] with Ac2O gave 80-92% diacetylated diazabicyclononane II (R2 = Ac). Treating I [R = H, R1 = Et, Ph, 3-pyridyl; R = R1 = Me; RR1 = (CH2)5] with aq. HONO gave 71-91% II (R2 = NO). Reaction of I (R = H, R1 = Et; R = R1 = Me) with BzCl or PhCH2Cl gave II (R2 = Bz, CH2Ph), resp.
IT **147698-79-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 147698-79-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-diacetyl-1,5-dimethyl- (9CI) (CA INDEX NAME)



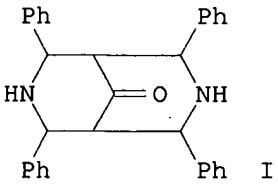
L13 ANSWER 40 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1993:136694 CAPLUS
DN 118:136694
TI Crystal and molecular structure of 1,5-dimethyl-9,9-dihydroxy-3,7-diazabicyclo[3.3.1]nonane dihydrochloride dihydrate
AU Goncharov, A. V.; Potekhin, K. A.; Struchkov, Yu. T.; Svetlanova, A. M.; Chemodanova, S. V.; Palyulin, V. A.; Zefirov, N. S.
CS Mosk. Gos. Univ., Moscow, Russia
SO Dokl. Akad. Nauk (1992), 323(2), 285-9 [Chem.]
CODEN: DAKNEQ
DT Journal
LA Russian
AB The title compd. is triclinic, space group P.hivin.1, with a 8.714(2), b 8.798(2), c 10.097(2) .ANG., .alpha. 77.67(2), .beta. 77.63(2), and .gamma. 82.39(2).degree.; dc = 1.44 for Z = 2. The at. coordinates are given. The structure was solved by direct methods and refined by least-squares to R = 0.059 and Rw = 0.0059. The bond lengths and angles are described. The H-bonding is depicted.
IT **146349-58-8**, 1,5-Dimethyl-9,9-dihydroxy-3,7-diazabicyclo[3.3.1]nonane dihydrochloride dihydrate
RL: PRP (Properties)
(crystal structure of)
RN 146349-58-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-9,9-diol, 1,5-dimethyl-, dihydrochloride, dihydrate (9CI) (CA INDEX NAME)



●2 HCl

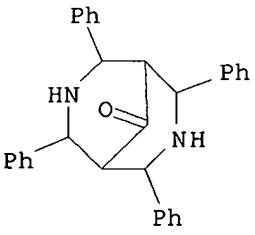
●2 H_2O

L[illegible] ANSWER 41 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1993:80837 CAPLUS
DN 118:80837
TI Synthesis of 2,4,6,8-tetraphenyl-3,7-diazabicyclo[3.3.1]nonan-9-one from benzylideneacetone
AU Kim, D. G.; Tulemisova, G. B.; Omarov, T. T.
CS Inst. Khim. Nefti Prir. Solei, Gurev, Kazakhstan
SO Zh. Org. Khim. (1992), 28(5), 1101-2
CODEN: ZORKAE; ISSN: 0514-7492
DT Journal
LA Russian
GI



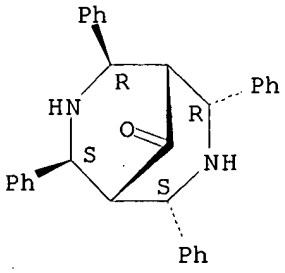
I

AB Treating PhCH:CHCOMe with PhCHO and NH4OAc in EtOH gave 38% diazabicyclononanone I via intermediate 2,6-diphenyl-4-piperidinone.
IT **37123-09-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



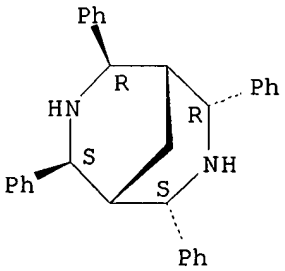
L13 ANSWER 42 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1992:469818 CAPLUS
DN 117:69818
TI A simple method for the preparation of 4,8,9,10-tetraphenyl-1,3-diazaadamantanes
AU Jeyaraman, R.; Ravindran, T.; Sujatha, M.
CS Dep. Chem., Bharathidasan Univ., Tiruchirapalli, 620 024, India
SO Indian J. Chem., Sect. B (1992), 31B(6), 362
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
OS CASREACT 117:69818
AB The title prepn. involves the reaction of aq. formaldehyde with 2,4,6,8-tetraaryl-3,7-diazabicyclo[3.3.1]nonanes. Yields of 78-83% were obtained.
IT **65732-77-6 75541-42-3 142698-37-1**
RL: RCT (Reactant)
(cyclocondensation of, with formaldehyde)
RN 65732-77-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



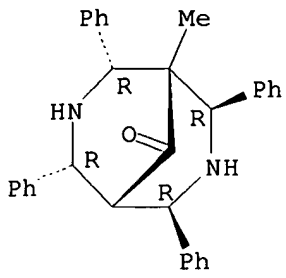
RN 75541-42-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetraphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 142698-37-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl-, (2R,4R,6R,8R)-rel- (9CI) (CA INDEX NAME)

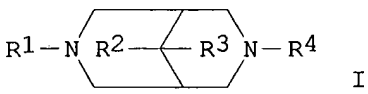
Relative stereochemistry.


Ph
Me
R
Ph
HN
R
O
R
NH
Ph
R
Ph

L43 ANSWER 43 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1992:440439 CAPLUS
DN 117:40439
TI Preparation of 3,7-diazabicyclo [3,3,1]nonanes as diuretics
IN Burow, Kurt; Buschmann, Gerd; Farjam, Arman; Kuehl, Ulrich; Varchmin, Gerda; Ziegler, Dieter; Schoen, Uwe
PA Kali-Chemie Pharma G.m.b.H., Germany
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 461574	A2	19911218	EP 1991-109449	19910608
	EP 461574	A3	19920325		
	EP 461574	B1	19970924		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DE 4019080	A1	19911219	DE 1990-4019080	19900615
	AT 158583	E	19971015	AT 1991-109449	19910608
	ES 2109244	T3	19980116	ES 1991-109449	19910608
	HU 58097	A2	19920128	HU 1991-1922	19910610
	HU 210686	B	19950628		
	CA 2044673	AA	19911216	CA 1991-2044673	19910614
	AU 9178377	A1	19911219	AU 1991-78377	19910614
	AU 640236	B2	19930819		
	JP 04230285	A2	19920819	JP 1991-142875	19910614
	JP 3086007	B2	20000911		
	US 5164401	A	19921117	US 1991-714886	19910617
PRAI	DE 1990-4019080	A	19900615		

OS MARPAT 117:40439
GI

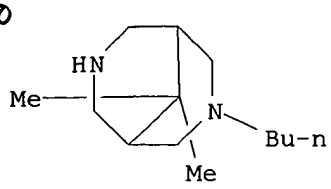


I

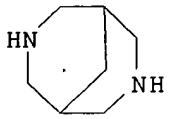
AB The 3,7-diazabicyclo[3.3.1]nonanes I [R1 = alkyl, alkenyl, cycloalkyl, benzyl; R2,R3 = alkyl; R2R3 = alkylene; R4 = (un)substituted phenylalkyl or diphenylmethane] are prepd. as diuretics. 3-Butyl-7-(2,5-dimethylbenzyl)-9,9-dimethyl-3,7-diazabicyclo[3.3.1]nonane (II) was prepd. by the reaction of 3-butyl-9,9-dimethyl-3,7-diazabicyclo[3.3.1]nonane with Li amide in DMF, followed by treatment with 2,5-dimethylbenzyl chloride in DMF. Oral administration of 10 mg II monosalicylate/kg had a strong diuretic effect in rats. Formulation examples are given.

IT **120466-42-4**
RL: BIOL (Biological study)
(condensation of, with dimethylbenzyl chloride)

RN 120466-42-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



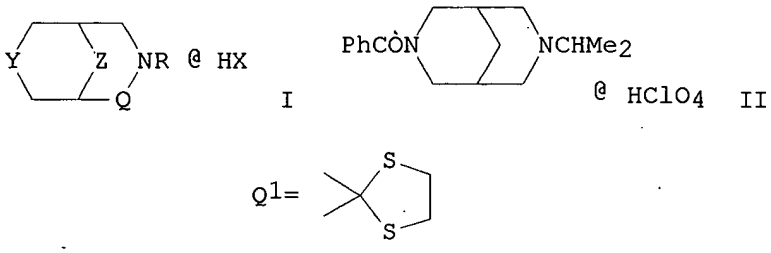
IT **280-74-0DP**, 3,7-Diazabicyclo[3.3.1]nonane, derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as diuretic)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 44 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1991:514550 CAPLUS
DN 115:114550
TI Preparation of salts of 3-azabicyclo[3.3.1]nonanes as antiarrhythmic agents
IN Berlin, Kenneth Darrell; Scherlag, Benjamin Jacob; Clarke, Cyril Roy; Otiv, Surendra Kamchandra; Zisman, Stan Alan; Sangiah, Subbiah; Mulekar, Satish Vasant
PA Oklahoma State University, USA
SO PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9107405	A1	19910530	WO 1990-US6625	19901113
	W: JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	US 5084572	A	19920128	US 1989-435976	19891113
	US 5110933	A	19920505	US 1990-610428	19901107
PRAI	US 1989-435976		19891113		
	US 1990-610428		19901107		

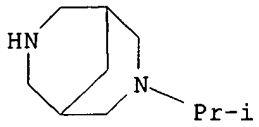
OS MARPAT 115:114550
GI



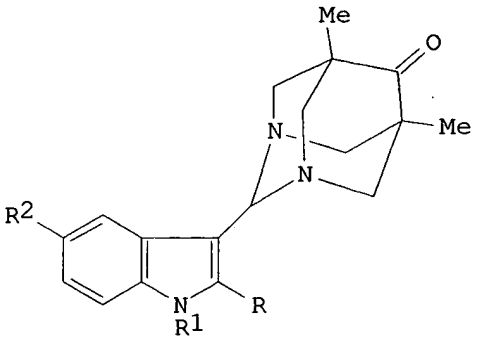
AB Title compds. [I; HX = pharmacol. acceptable acid; Q = CH2, CO; Y = S, SO, CHCO2Et, NR1; Z = CH2, CO, C(OMe)2, Q1; R = H, alkyl, (substituted) PhCH2, PhCO; PhSO2, Q1; R1 = alkyl, (substituted) PhCH2, PhCO], were prepd. 7-Benzyl-3-isopropyl-3,7-diazabicyclo[3.3.1]nonane (prepn. from 1-isopropyl-4-piperidinone given) was refluxed with Pd/HCO2NH4 in MeOH to give the unprotected amine; the latter was acylated with PhCOCl in 10% NaOH/CH2Cl2 and the product was converted to perchlorate salt II. Several I at 3 mg/kg in dogs effectively eliminated induced ventricular tachycardia.

IT **129039-76-5P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as antiarrhythmic)

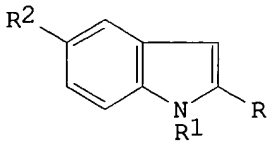
RN 129039-76-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)- (9CI) (CA INDEX NAME)


HN
N
Pr-i

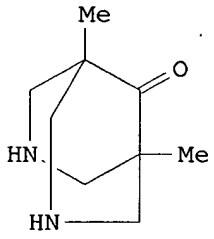
L13 ANSWER 45 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1991:449662 CAPLUS
DN 115:49662
TI Synthesis and transformation of polyhedric compounds. XIII. Search for antitumor agents among indolyl-1,3-diazaadamantanes
AU Chachoyan, A. A.; Shkulev, V. A.; Pisarskii, Yu. B.; Saakyan, G. S.; Agadzhanyan, Ts. E.; Garibdzhanyan, B. T.
CS Inst. Tonkoi Org. Khim., Yerevan, USSR
SO Khim.-Farm. Zh. (1991), 25(4), 45-8
CODEN: KHFZAN; ISSN: 0023-1134
DT Journal
LA Russian
GI



I

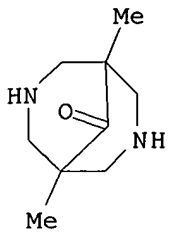


II

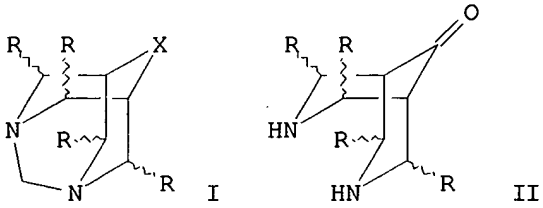


III

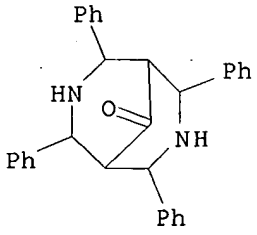
AB The title compds. I (R, R1 = H, Me; R2 = H, OMe, dialkylaminosulfonyl) were prepd. by cyclocondensation of formylindoles II with diazabicyclononanone III in 52-67% yield. Their antitumor activity was examd.
IT **80808-96-4**
RL: RCT (Reactant)
(cyclocondensation of, with formylindoles)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)


Me
HN
O
NH
Me

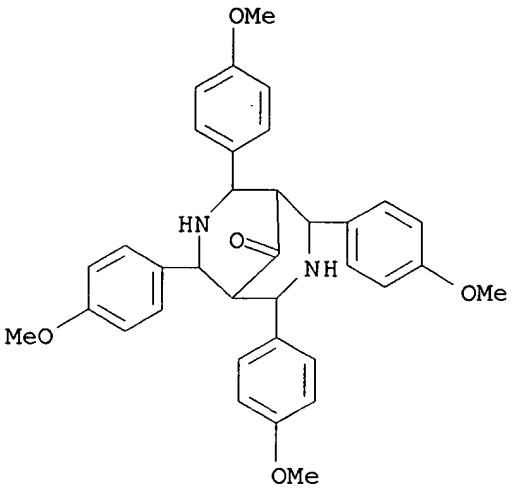
L13 ANSWER 46 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1991:122245 CAPLUS
DN 114:122245
TI An improved synthesis of 4,8,9,10-tetraaryl-1,3-diazaadamantanes
AU Sivasubramanian, S.; Sundaravadivelu, M.; Arumugam, N.
CS Dep. Org. Chem., Madurai Kamaraj Univ., Madurai, 625 021, India
SO Org. Prep. Proced. Int. (1990), 22(5), 645-8
CODEN: OPPIAK; ISSN: 0030-4948
DT Journal
LA English
OS CASREACT 114:122245
GI



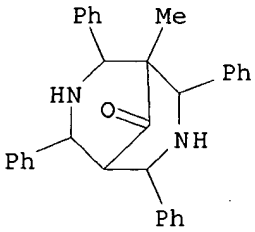
AB The diazaadamantanes I (R = Ph, 4-MeC6H4, X = CH2) were prepd. by Wolff-Kishner redn. of the corresponding I (X = CO) which were prepd. by cyclocondensation diazabicyclononanones II with paraformaldehyde in DMSO.
IT **37123-09-4 55407-47-1 60823-94-1**
77737-97-4 77841-40-8
RL: RCT (Reactant)
(cyclocondensation of, with paraformaldehyde, diazaadamantanone from)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



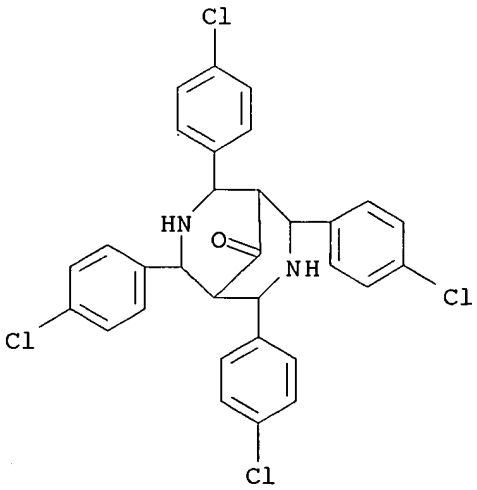
RN 55407-47-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



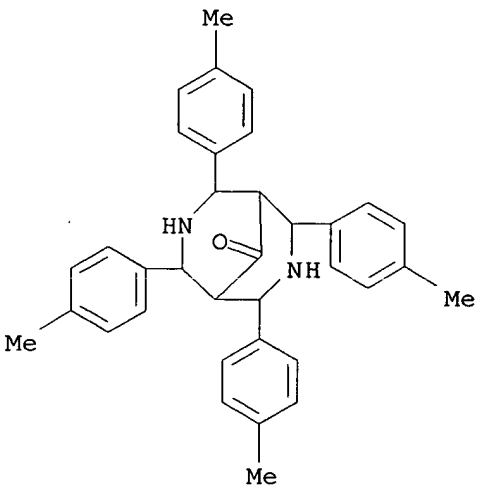
RN 60823-94-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



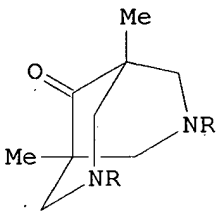
RN 77737-97-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-chlorophenyl)- (9CI) (CA INDEX NAME)



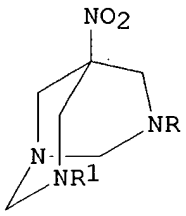
RN 77841-40-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-
(9CI) (CA INDEX NAME)



L13 ANSWER 47 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1991:121397 CAPLUS
DN 114:121397
TI Synthesis and reactions of polyhedric compounds. XI. Synthesis and antitumor activity of new derivatives of 3,7-diaza- and 1,3,7-triazabicyclo[3.3.1]nonanes
AU Minasyan, G. G.; Saakyan, G. S.; Agadzhanyan, Ts. E.; Chachoyan, A. A.; Garibdzhanyan, B. T.
CS Inst. Tonk. Org. Khim., Yerevan, USSR
SO Arm. Khim. Zh. (1990), 43(2), 107-12
CODEN: AYKZAN; ISSN: 0515-9628
DT Journal
LA Russian
GI



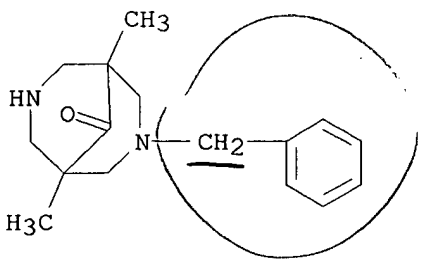
I



II

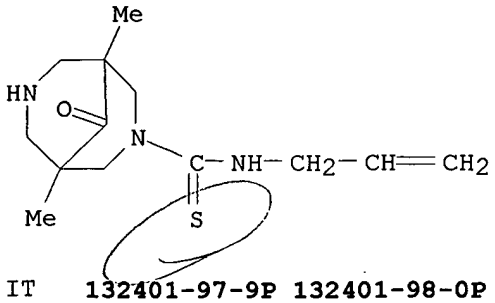
AB Treating diazabicyclononanone I (R = R1 = H) with epichlorohydrin, 3-phenoxy-1,2-epoxypropane, PhNCS, or ClCH2CN gave disubstituted I [R = CH2CH(OH)CH2Cl, CH2CH(OH)CH2OPh, CSNHPh, CH2CN] and monosubstituted I (R = CSNHCH2CH:CH2, COCH:CHCO2H, COCH2CH2CO2H) when treated with allyl isothiocyanate, maleic or succinic anhydrides. Addnl. obtained were triazabicyclononanes II (R2 = HC.tplbond.CCH2, COMe, CSNHPh, R3 = PhCH2; R2 = CSNHPh R3 = HC.tplbond.CCH2). I and II were useful neoplasm inhibitors against sarcoma 45 and Ehrlich's carcinoma.

IT **107606-88-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and addn. reaction with Ph isothiocyanate)
RN 107606-88-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



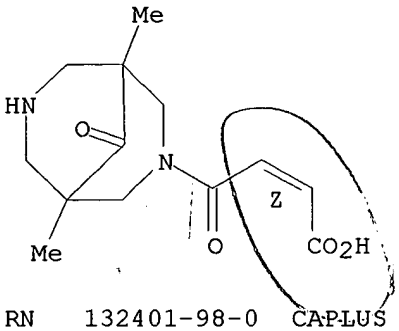
IT **132401-96-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and toxicity of)
RN 132401-96-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, 1,5-dimethyl-9-oxo-N-2-

propenyl- (9CI) (CA INDEX NAME)

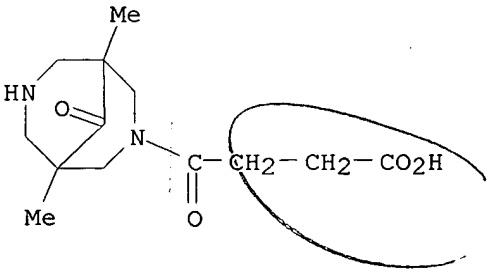


IT **132401-97-9P 132401-98-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 132401-97-9 CAPLUS
CN 2-Butenoic acid, 4-(1,5-dimethyl-9-oxo-3,7-diazabicyclo[3.3.1]non-3-yl)-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

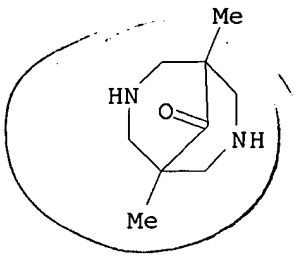
Double bond geometry as shown.



RN 132401-98-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-butanoic acid, 1,5-dimethyl-.gamma.,9-dioxo- (9CI) (CA INDEX NAME)



IT **80808-96-4**
RL: RCT (Reactant)
(substitution and addn. reactions of)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)


Me
HN
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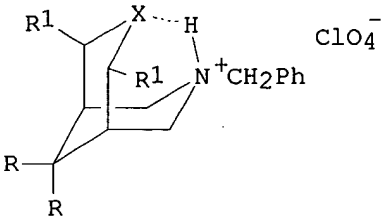
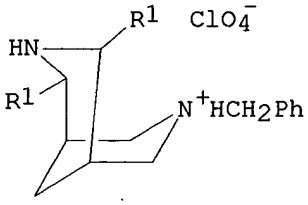
NH
Me

L13 ANSWER 48 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1990:532149 CAPLUS
DN 113:132149
TI A study of the synthesis and antiarrhythmic properties of selected 3,7-diheterabicyclo[3.3.1]nonanes with substituents at the 2,4-positions and at the 9-position
AU Smith, Gary Steven; Thompson, Mark Daniel; Berlin, Kenneth Darrell; Holt, Elizabeth Manners; Scherlag, Benjamin Jacob; Patterson, Eugene; Lazzara, Ralph
CS Dep. Chem., Oklahoma State Univ., Stillwater, OK, 74078, USA
SO Eur. J. Med. Chem. (1990), 25(1), 1-8
CODEN: EJMCA5; ISSN: 0223-5234
DT Journal
LA English
OS CASREACT 113:132149
GI



I

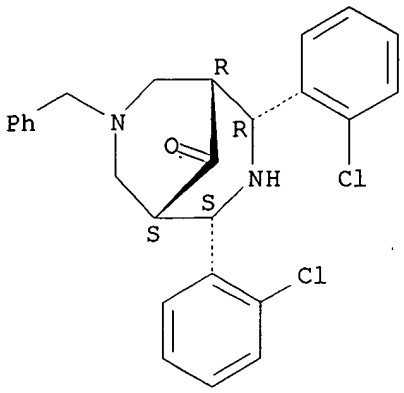


II

AB Some members of the family of 3,7-diheterabicyclo[3.3.1]nonanes I (X = S, R = OMe, R1 = H; X = NCH2Ph, R = OH, OMe, R1 = H; X = NH, R = H, R1 = 2-ClC6H4) and II with substituents at the 2-, 4- and 9-positions were synthesized via Mannich reaction. Hearts of anesthetized dogs with myocardial infarctions were subjected to ventricular tachycardia (VT). I and II exhibited ability to abolish VT [or prevent the VT from being sustained] or reduce the rate of VT. A CH2 group at the 9-position or the Me ketal group [(MeO)2C(9)] enhanced the antiarrhythmic activity regardless of whether S or N was at 3-position. Compds. with aryl groups alpha to the heteroatoms were less effective in controlling VT. Lidocaine was the std.

IT **118958-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., crystal structure, conformation, hydrogenation, and nitrogen NMR of)
RN 118958-21-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (endo,endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

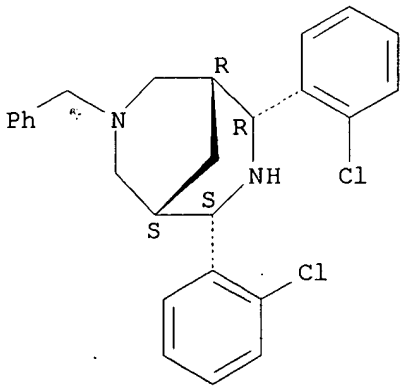


IT **118958-24-0P**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn., crystal structure, nitrogen NMR, and antiarrhythmic activity of)
RN 118958-24-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (endo,endo)-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

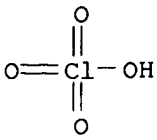
CRN 118958-23-9
CMF C26 H26 Cl2 N2
CDES 2:ENDO,ENDO

Relative stereochemistry.



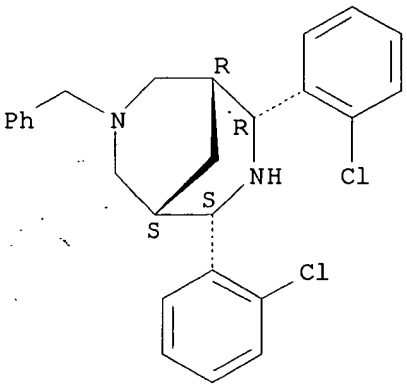
CM 2

CRN 7601-90-3
CMF Cl H O4



IT **118958-23-9P**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn., nitrogen NMR, and reaction of, with perchloric acid, conformation and antiarrhythmic activity of)
RN 118958-23-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (endo,endo)- (9CI) (CA INDEX NAME)

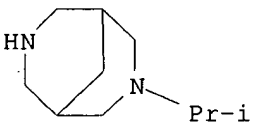
Relative stereochemistry.



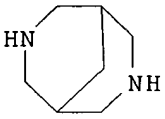
L13 ANSWER 49 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1990:515277 CAPLUS
DN 113:115277
TI The preparation of amide derivatives of 3-azabicyclo[3.3.1]nonanes as new potential antiarrhythmic agents
AU Zisman, Stan A.; Berlin, K. Darrell; Scherlag, B. J.
CS Dep. Chem., Oklahoma State Univ., Stillwater, OK, 74074, USA
SO Org. Prep. Proced. Int. (1990), 22(2), 255-64
CODEN: OPPIAK; ISSN: 0030-4948
DT Journal
LA English
OS CASREACT 113:115277
GI

I

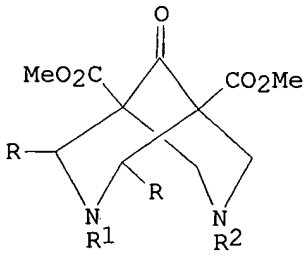
AB The title compds. I [X = S, R = Bz; X = NCHMe2, R = Bz, 4-ClC6H4CO, 3,4-(MeO)2C6H3CO, 3,4,5-(MeO)3C6H2CO, PhSO2] were prep. from 4-thianone and 1-isopropyl-4-piperidinone.
IT **129039-76-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and acylation or sulfonation of)
RN 129039-76-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)- (9CI) (CA INDEX NAME)



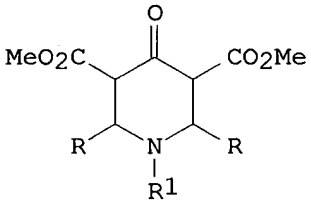
L13 ANSWER 50 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1990:515129 CAPLUS
DN 113:115129
TI Part I. Synthesis and antiarrhythmic properties of substituted 3,7-diazabicyclo[3.3.1]nonanes and 3-azabicyclo[3.3.1]nonanes, and derivatives. Part II. Oxygen-17 NMR analysis of substituted 1-hetera-4-cyclohexanones
AU Mulekar, Satish Vasant
CS Oklahoma State Univ., Stillwater, OK, USA
SO (1989) 181 pp. Avail.: Univ. Microfilms Int., Order No. DA9004033 From: Diss. Abstr. Int. B 1990, 50(9), 3997
DT Dissertation
LA English
AB Unavailable
IT **280-74-0DP**, 3,7-Diazabicyclo[3.3.1]nonane, derivs.
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antiarrhythmic activity of)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



L13 ANSWER 51 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1990:20978 CAPLUS
DN 112:20978
TI Synthesis, stereochemistry and analgesic activity of 3,7-diazabicyclo[3.3.1]nonan-9-ones and 1,3-diazaadamantan-6-ones
AU Samhammer, Annemarie; Holzgrabe, Ulrike; Haller, Rolf
CS Pharm. Inst., Univ. Kiel, Kiel, 2300, Fed. Rep. Ger.
SO Arch. Pharm. (Weinheim, Ger.) (1989), 322(9), 551-5
CODEN: ARPMAS; ISSN: 0365-6233
DT Journal
LA German
OS CASREACT 112:20978
GI



I

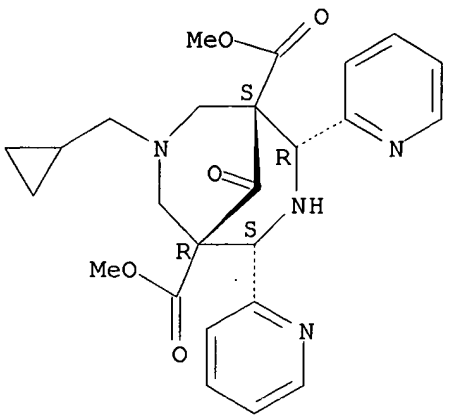


II

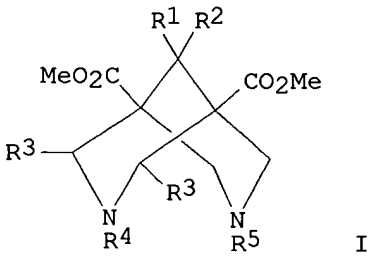
AB The 1,3-diazaadamantan-6-ones I (R = 2-pyridyl, 6-methyl-2-pyridyl, Ph, 3,4,5-Me3C6H2, R1R2 = CH2) are synthesized from the 4-piperidones II. Different conditions lead to stereoisomeric structures. The 3,7-diazabicyclo[3.3.1]nonan-9-ones I (R1 = H, Me, R2 = Me, cyclopropylmethyl, R = same) show similar geometrical isomerism. Whereas the diazabicyclononanes show opioid-like effects, I (R = 2-pyridyl, R1R2 = CH2) is a peripheral analgesic.

IT **124189-56-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 124189-56-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 7-(cyclopropylmethyl)-9-oxo-2,4-di-2-pyridinyl-, dimethyl ester, (endo,endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.


MeO
O
S
N
R
N
O
NH
S
R
MeO
O
N

L1 ANSWER 52 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1990:20977 CAPLUS
DN 112:20977
TI Reductions of 3,7-diazabicyclo[3.3.1]nonan-9-ones and corresponding 1,3-diazaadamantan-6-ones
AU Samhammer, Annemarie; Holzgrabe, Ulrike; Haller, Rolf
CS Pharm. Inst., Univ. Kiel, Kiel, 2300, Fed. Rep. Ger.
SO Arch. Pharm. (Weinheim, Ger.) (1989), 322(9), 545-50
CODEN: ARPMAS; ISSN: 0365-6233
DT Journal
LA German
OS CASREACT 112:20977
GI

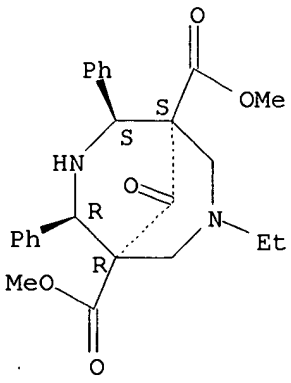


I

AB The title compds. I (R1R2 = O, R3 = 2-pyridyl, Ph, 6-methyl-2-pyridyl, R4 = H, Me, R5 = Me, Et; R4R5 = CH2, resp.) are reduced by NaBH4 and LiAlH4 in various solvents. The reasons for the proportion of the epimeric alcs. are discussed. The reaction of I (R1R2 = O, R3 = Ph, R4R5 = CH2) with MeMgI yields the ring-opened N-alkylated product.

IT **124189-67-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 124189-67-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 7-ethyl-9-oxo-2,4-diphenyl-, dimethyl ester, (endo,endo)- (9CI) (CA INDEX NAME)

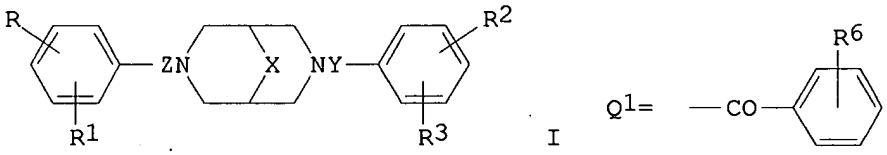
Relative stereochemistry.



L43 ANSWER 53 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1989:515218 CAPLUS
DN 111:115218
TI Preparation and testing of bispidin derivatives as class III antiarrhythmics
IN Lubisch, Wilfried; Binnig, Fritz; Von Philipsborn, Gerda
PA BASF A.-G., Fed. Rep. Ger.
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

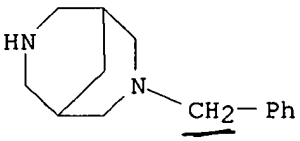
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 308843	A2	19890329	EP 1988-115299	19880917
	EP 308843	A3	19900808		
	EP 308843	B1	19931215		
	R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
	DE 3732094	A1	19890406	DE 1987-3732094	19870924
	JP 01102078	A2	19890419	JP 1988-235124	19880921
	US 4959373	A	19900925	US 1988-247645	19880922
PRAI	DE 1987-3732094		19870924		

OS MARPAT 111:115218
GI



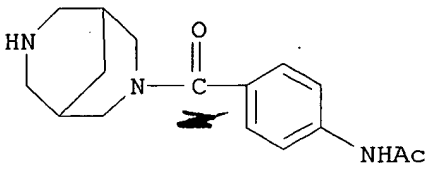
AB The title compds. (I; R, R1, R3 = H, C1-4 alkyl, halo, C1-4 alkoxy; R2 = C1-4 alkyl halo, CN, C1-4 alkoxy NHS,2Me, CF3 NHCOMe, amino, NO2; X = CH2, CO, CR4OR5; R4 = H, C1-4 alkyl; R5 = R4, Q1; R6 = R4, halo, C1-4 alkoxy; Y = CO, CONH; Z = C1-4 alkylene), were prepd. 3-(4-Aminobenzoyl)-7-benzyl-3,7-diazabicyclo[3.3.1]nonane in THF at ice temp. was treated with AcCl in THF and then with Et3N at room temp. The mixt. was stirred overnight to give 3-(4-acetaminobenzoyl)-7-benzyl-3,7-diazabicyclo[3.3.1]nonane. I in guinea pigs showed prolongation of QT times with ED20's of 2.4-4.6 mg/kg i.v.

IT **69407-32-5**
RL: RCT (Reactant)
(acylation of, in prepn. of antiarrhythmics)
RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)

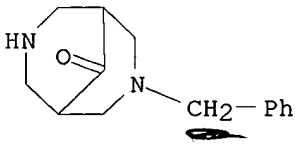


IT **122455-78-1**
RL: RCT (Reactant)

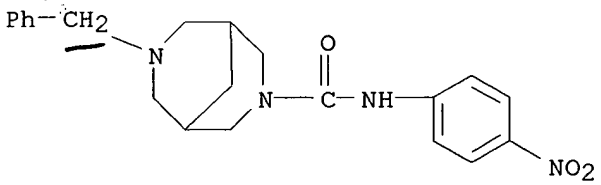
(condensation of, with chlorobenzyl bromide, in prepn. of antiarrhythmics)
RN 122455-78-1 CAPLUS
CN Acetamide, N-[4-(3,7-diazabicyclo[3.3.1]non-3-ylcarbonyl)phenyl]- (9CI) (CA INDEX NAME)



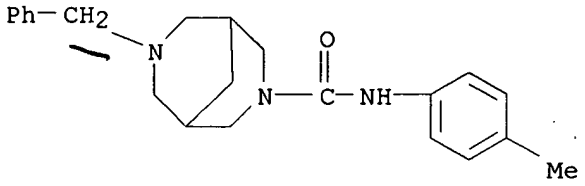
IT **122455-82-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and condensation of, with chlorobenzoyl chloride, in prepn. of antiarrhythmics)
RN 122455-82-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



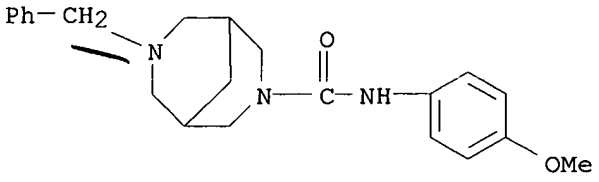
IT **122455-80-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenation of, in prepn. of antiarrhythmics)
RN 122455-80-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(4-nitrophenyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



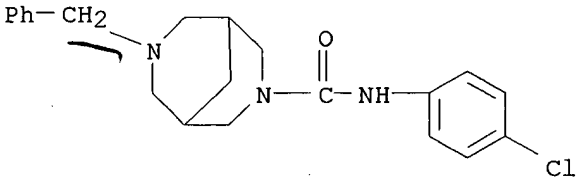
IT **122455-61-2P 122455-62-3P 122455-63-4P**
122455-64-5P 122455-65-6P 122455-66-7P
122455-67-8P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as antiarrhythmic)
RN 122455-61-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(4-methylphenyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



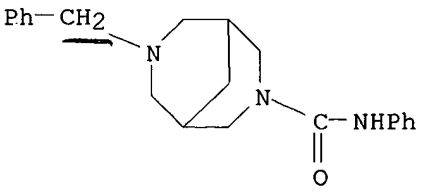
RN 122455-62-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(4-methoxyphenyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



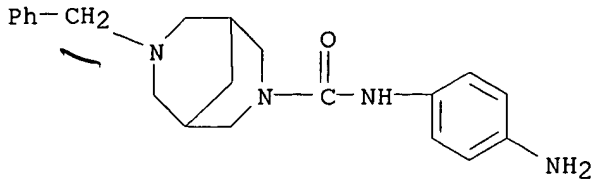
RN 122455-63-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(4-chlorophenyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



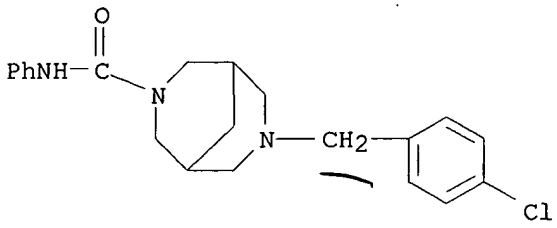
RN 122455-64-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-phenyl-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



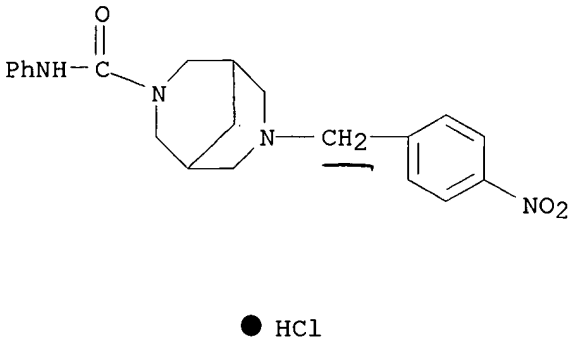
RN 122455-65-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(4-aminophenyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 122455-66-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[(4-chlorophenyl)methyl]-N-phenyl- (9CI) (CA INDEX NAME)

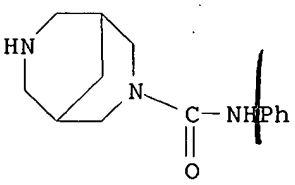


RN 122455-67-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 7-[(4-nitrophenyl)methyl]-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

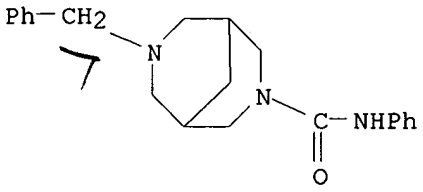


● HCl

IT **122455-81-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antiarrhythmics)
RN 122455-81-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-phenyl- (9CI) (CA INDEX NAME)



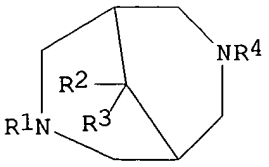
IT **122455-64-5**
RL: RCT (Reactant)
(reaction of, in prepn. of antiarrhythmics)
RN 122455-64-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-phenyl-7-(phenylmethyl)-(9CI) (CA INDEX NAME)



L1 ANSWER 54 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1989:478039 CAPLUS
DN 111:78039
TI Preparation and testing of 3-cinnamyl or 3-benzhydryl-3,7-diazabicyclo[3.3.1]nonanes as bradycardiacs and antiarrhythmics
IN Schoen, Uwe; Kehrbach, Wolfgang; Buschmann, Gerd; Kuehl, Ulrich Gottfried; Ziegler, Dieter
PA Kali-Chemie Pharma G.m.b.H., Fed. Rep. Ger.
SO Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 306871	A2	19890315	EP 1988-114428	19880903
	EP 306871	A3	19900801		
	EP 306871	B1	19931208		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DE 3730224	A1	19890323	DE 1987-3730224	19870909
	DE 3730222	A1	19890330	DE 1987-3730222	19870909
	US 4912113	A	19900327	US 1988-239766	19880902
	ES 2061580	T3	19941216	ES 1988-114428	19880903
	ZA 8806619	A	19890530	ZA 1988-6619	19880906
	JP 01068372	A2	19890314	JP 1988-222583	19880907
	HU 48248	A2	19890529	HU 1988-4606	19880907
	HU 198718	B	19891128		
	DD 282228	A5	19900905	DD 1988-319603	19880907
	FI 8804138	A	19890310	FI 1988-4138	19880908
	DK 8804989	A	19890310	DK 1988-4989	19880908
	NO 8804008	A	19890310	NO 1988-4008	19880908
	AU 8822005	A1	19890323	AU 1988-22005	19880908
	AU 605904	B2	19910124		
PRAI	DE 1987-3730222		19870909		
	DE 1987-3730224		19870909		

OS MARPAT 111:78039
GI

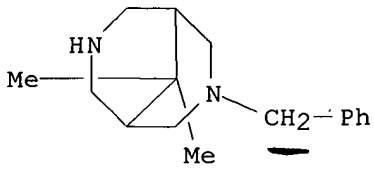


I

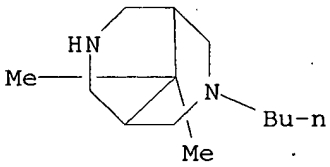
AB The title compds. [I; R1 = C1-6 alkyl, C4-9 cycloalkyl, PhCH2; R2,R3 = lower alkyl; R2R3 = C3-6 alkylene; R4 = (substituted) Ph2CH, PhCH:CHCH2], useful as antiarrhythmics and bradycardiacs, were prepd. 3-Butyl-9,9-dimethyl-3,7-diazabicyclo[3.3.1]nonane, Ph2CHBr, and K2CO3 were stirred 12 h in DMF to give 7-diphenylmethyl-3-n-butyl-9,9-dimethyl-3,7-diazabicyclo[3.3.1]nonane. I at 10 .mu.mol/kg i.v. in rats decreased pulse by 27-49% while changing blood pressure by -11 to +11%.

IT **120466-46-8**
RL: RCT (Reactant)
(acylation of, by cinnamoyl chloride, in prepn. of antiarrhythmic-

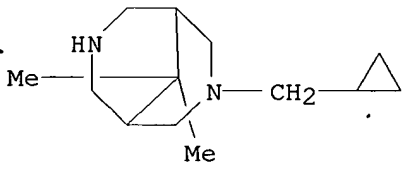
bradycardiac)
RN 120466-46-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



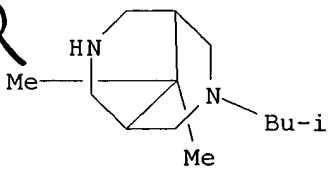
IT **120466-42-4 122032-37-5 122032-38-6**
RL: RCT (Reactant)
(condensation of, with diphenylmethylbromide, in prepn. of antiarrhythmic-bradycardiac)
RN 120466-42-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



RN 122032-37-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(cyclopropylmethyl)-9,9-dimethyl- (9CI) (CA INDEX NAME)



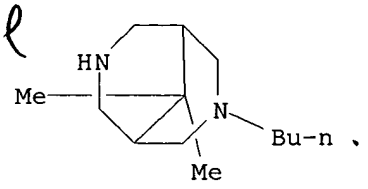
RN 122032-38-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-(2-methylpropyl)- (9CI) (CA INDEX NAME)



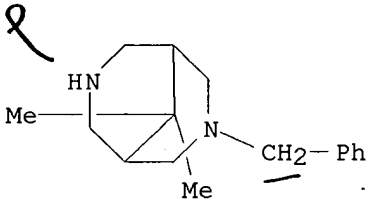
IT **120466-42-4P 120466-46-8P 122032-35-3P**

122032-36-4P 122032-37-5P 122032-38-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antiarrhythmic and bradycardiac)

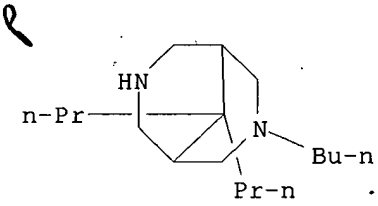
RN 120466-42-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



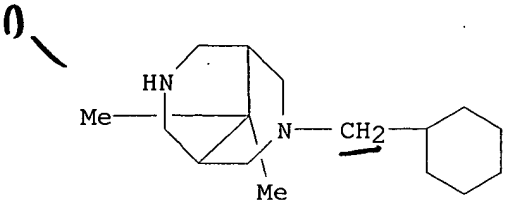
RN 120466-46-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



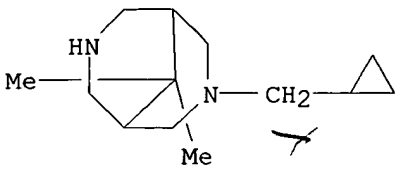
RN 122032-35-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9,9-dipropyl- (9CI) (CA INDEX NAME)



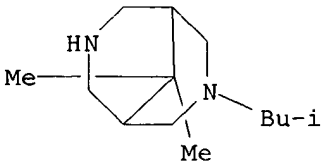
RN 122032-36-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(cyclohexylmethyl)-9,9-dimethyl- (9CI) (CA INDEX NAME)



RN 122032-37-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(cyclopropylmethyl)-9,9-dimethyl- (9CI) (CA INDEX NAME)



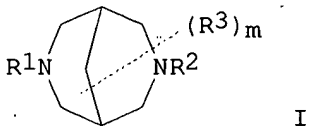
RN 122032-38-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-(2-methylpropyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 55 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1989:415252 CAPLUS
DN 111:15252
TI Improving the lightfastness of colored organic materials
IN Kaneko, Yutaka
PA Konica Co., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63281158	A2	19881117	JP 1987-116326	19870513

GI

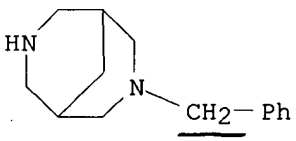


I

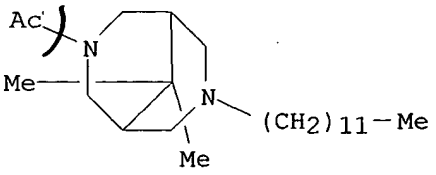
AB In the title method, an org. colored material and I [R1, R2 = H, alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynl, aryl, heterocycycl, acyl, sulfonyl, carbamoyl, phosphonyl, sulfamoyl, oxycarbonyl; R3 = substituent; m = 0-6] are allowed to coexist. The method is esp. useful in color photog., inks and fabric dyes. A photog material contained I [R1 = CH3; R2 = C6H5CH2] and a magenta dye to prevent photofading.

IT **69407-32-5 121171-74-2 121171-79-7**
RL: USES (Uses)
(lightfastness improvement additive, for orgs.)

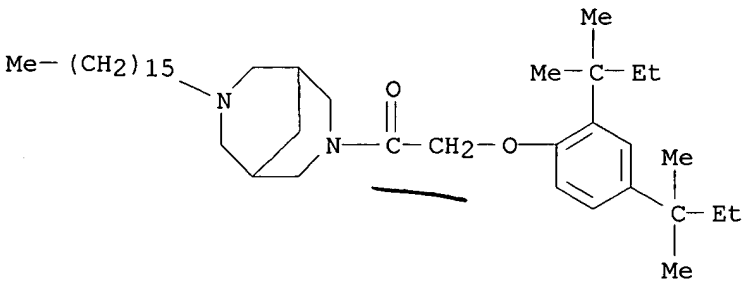
RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 121171-74-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-acetyl-7-dodecyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



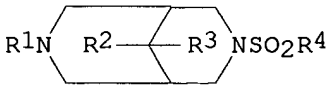
RN 121171-79-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-[[2,4-bis(1,1-dimethylpropyl)phenoxy]acetyl]-7-hexadecyl- (9CI) (CA INDEX NAME)



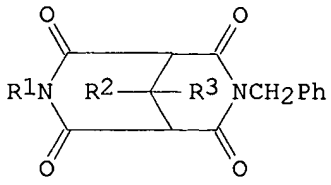
L13 ANSWER 56 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1989:212804 CAPLUS
DN 110:212804
TI Preparation of 3-sulfonyl-3,7-diazabicyclo[3.3.1]nonanes as stomach motility stimulants
IN Schoen, Uwe; Kehrbach, Wolfgang; Wolf, Klaus Ullrich
PA Kali-Chemie Pharma G.m.b.H., Fed. Rep. Ger.
SO Ger. Offen., 13 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3722134	A1	19890119	DE 1987-3722134	19870704
	EP 301245	A2	19890201	EP 1988-110180	19880625
	EP 301245	A3	19890524		
	EP 301245	B1	19930908		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	JP 01029377	A2	19890131	JP 1988-159562	19880629
	US 4906640	A	19900306	US 1988-214032	19880630
	US 4983611	A	19910108	US 1989-401749	19890925
PRAI	DE 1987-3722134		19870704		
	US 1988-214032		19880630		

OS MARPAT 110:212804
GI



I

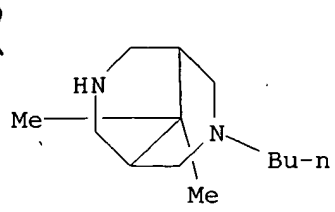


II

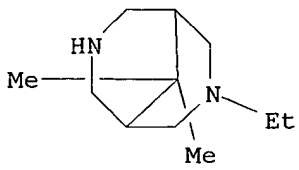
AB The title compds. [I; R1 = alkyl, cycloalkyl, PhCH2; R2, R3 = H, alkyl; R2R3 = C3-6 alkylene; R4 = alkyl, thienyl, halothienyl, (CH2)nR5; R5 = (un)substituted Ph; n = 0-3] were prepd. Tetraoxodiazabicyclononane II (R1 = Bu, R2 = R3 = Me) (prepn. described) was reduced and deprotected to give 7-butyl-9,9-dimethyl-3,7-diazabicyclo[3.3.1]nonane which was stirred 3 h with 3,4-Cl2C6H3SO2Cl in CH2Cl2 to give I.HCl (R1 = Bu, R2 = R3 = Me, R4 = 3,4-Cl2C6H3) (III) which increased the amplitude of rat gastric peristalsis >10-fold at 100 .mu.mol/kg i.p. Tablets were prepd. each contg. III 20, starch 69, lactose 135, gelatin 6, talc 5, and Mg stearate 5 mg.

IT **120466-42-4P 120466-43-5P 120466-44-6P**
120466-46-8P 120482-82-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of stomach motility stimulants)

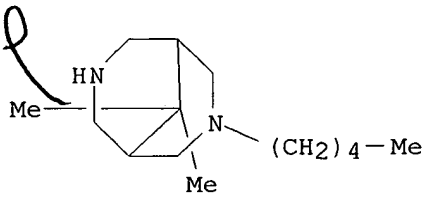
RN 120466-42-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



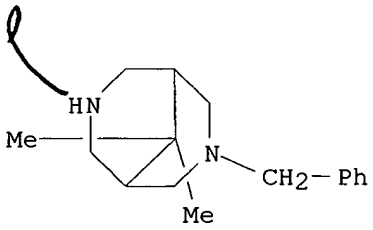
RN 120466-43-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-ethyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



RN 120466-44-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-pentyl- (9CI) (CA INDEX NAME)

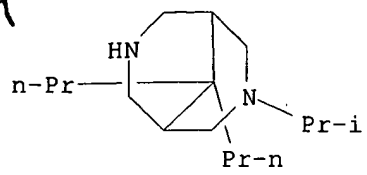


RN 120466-46-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 9,9-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 120482-82-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(1-methylethyl)-9,9-dipropyl- (9CI) (CA INDEX NAME)

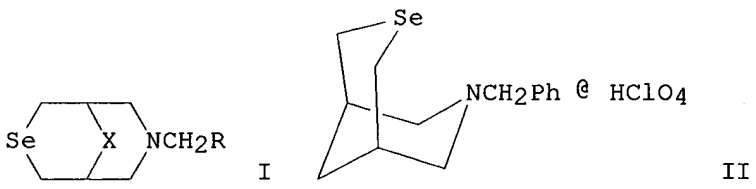
p



L13 ANSWER 57 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1989:95288 CAPLUS
DN 110:95288
TI Preparation of 3-selena-7-azabicyclo[3.3.1]nonanes as antiarrhythmic agents
IN Berlin, Kenneth D.; Thompson, Mark D.; Scherlag, Benjamin J.; Smith, Gary S.
PA Oklahoma State University, USA
SO U.S., 24 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4778892	A	19881018	US 1987-48325	19870511
	US 4910311	A	19900320	US 1988-222057	19880708
	US 4980468	A	19901225	US 1989-448658	19891211
	US 5043445	A	19910827	US 1990-596550	19901115
	US 5268481	A	19931207	US 1991-706215	19910528
PRAI	US 1987-48325		19870511		
	US 1988-222057		19880708		
	US 1989-448658		19891211		
	US 1990-596550		19901115		

OS MARPAT 110:95288
GI

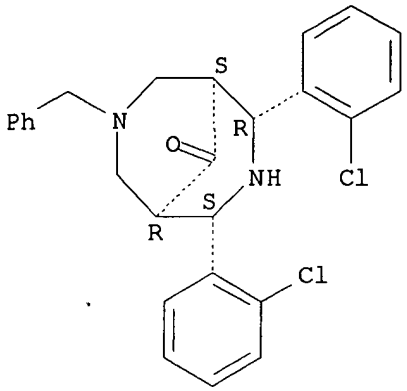


AB The title compds. [I; R = Ph, PhCH2, 4-MeOC6H4CH2, 3,4-(MeO)2C6H3CH2, 2-thienyl; X = CO, CH2, C(OH)2, C(OMe)2] and their aza, oxa, and thia analogs and salts were prepd. as antiarrhythmics. PhCH2NH2, paraformaldehyde, HOAc, and 4-selenanone were refluxed in MeOH to give 43% exo-I (R = Ph, X = CO) which was heated 12 h at 140.degree. with N2H4 in triethylene glycol to give, after acidification, 75% endo-I.HClO4 (R = Ph, X = CH2) (II). I reduce or eliminate artificially induced, sustained ventricular tachycardia in dogs at 3 and 6 mg/kg, their effect being superior to that of lidocaine.

IT **118958-20-6P 118958-21-7P 118958-22-8P**
118958-23-9P 118958-24-0P 119001-04-6P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as antiarrhythmic)

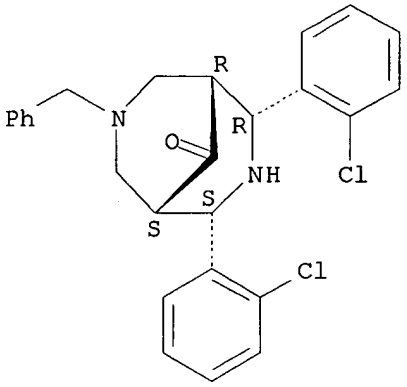
RN 118958-20-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (exo,exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



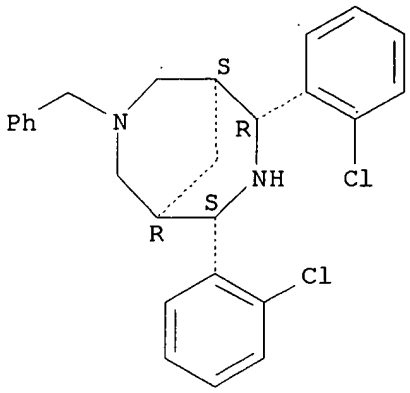
RN 118958-21-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (endo,endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



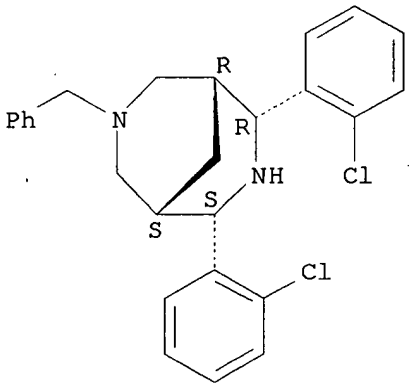
RN 118958-22-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (exo,exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 118958-23-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (endo,endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

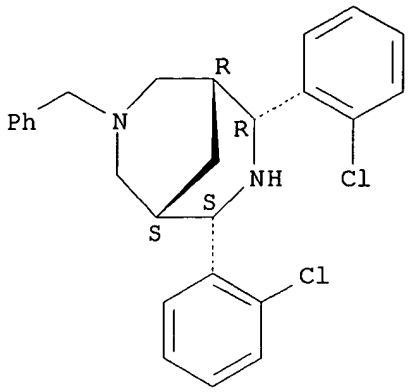


RN 118958-24-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (endo,endo)-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

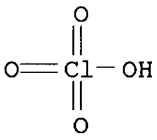
CRN 118958-23-9
CMF C26 H26 Cl2 N2
CDES 2:ENDO,ENDO

Relative stereochemistry.



CM 2

CRN 7601-90-3
CMF Cl H O4

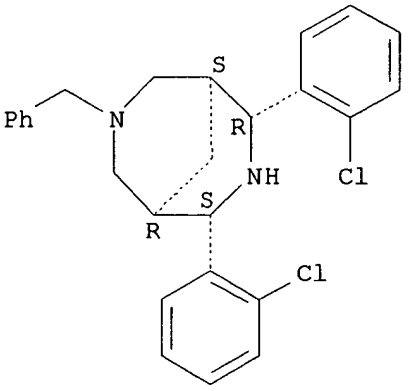


RN 119001-04-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4-bis(2-chlorophenyl)-7-(phenylmethyl)-, (exo,exo)-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

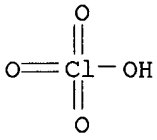
CRN 118958-22-8
CMF C26 H26 Cl2 N2
CDES 2:EXO,EXO

Relative stereochemistry.

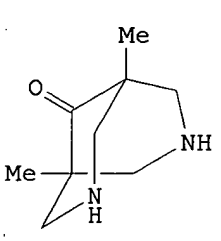


CM 2

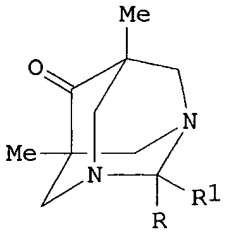
CRN 7601-90-3
CMF Cl H O4



L13 ANSWER 58 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1987:439733 CAPLUS
DN 107:39733
TI Synthesis and transformations of polyhedral compounds. X. Synthesis of 2-substituted 5,7-dimethyl-1,3-diazaadamantan-6-ones
AU Saakyan, G. S.; Arutyunyan, G. L.; Agadzhanyan, Ts. E.; Paronikyan, R. V.
CS Inst. Tonk. Org. Khim., Yerevan, USSR
SO Arm. Khim. Zh. (1986), 39(4), 242-6
CODEN: AYKZAN; ISSN: 0515-9628
DT Journal
LA Russian
OS CASREACT 107:39733
GI

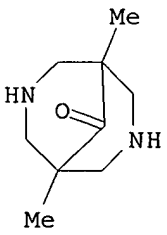


I

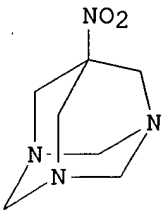


II

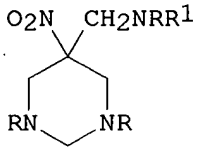
AB Condensation of diazabicyclononanone I with aldehydes and ketones gave 26 title compds. II [e.g., R, R1, and % yield given: 2-FC6H4, H, 70; 5,2-Br(HO)C6H3, H, 42; 3-pyridyl, H, 62; Et, H, 91; RR1 = (CH2)4, 68].
IT **80808-96-4**
RL: RCT (Reactant)
(cyclocondensation of, with aldehydes and ketones)
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)



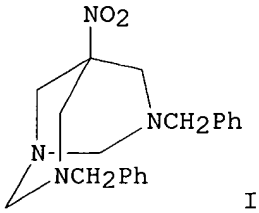
L13 ANSWER 59 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1987:156393 CAPLUS
DN 106:156393
TI Preparation and reactions of polyhedral compounds. IX. Reaction of 1,3-diaza- and 1,3,5-triazaadamantanes with halo compounds
AU Minasyan, G. G.; Mkrtchyan, M. B.; Agadzhanyan, Ts. E.
CS Inst. Tonkoi Org. Khim. im. Mndzhoyana, Yerevan, USSR
SO Arm. Khim. Zh. (1986), 39(1), 44-8
CODEN: AYKZAN; ISSN: 0515-9628
DT Journal
LA Russian
OS CASREACT 106:156393
GI



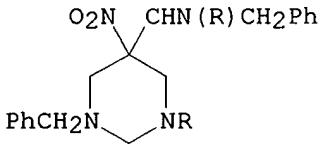
I



II

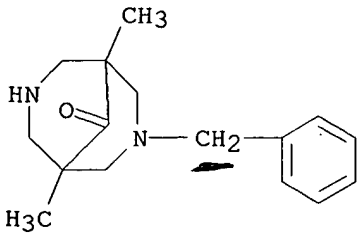


III

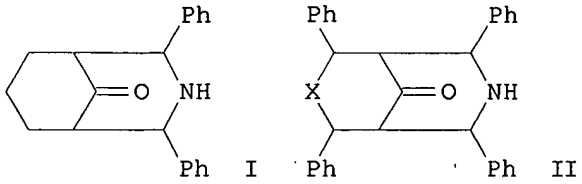


IV

AB Treating 7-nitro-1,3,5-triazaadamantane (I) with HC.tplbond.CCH2Br gave 69% pyrimidine II (R = R1 = HC.tplbond.CCH2); with CH2:CHCH2Br, 45% II (R = CH2CH:CH2, R1 = H) was obtained. Treating triazabicyclononane III with HC.tplbond.CCH2Br or AcCl gave 62 and 57% pyrimidines IV (R = HC.tplbond.CCH2, Ac), resp.
IT **107606-88-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction with benzyl chloride)
RN 107606-88-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



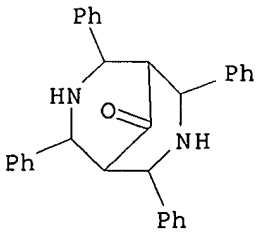
L3 ANSWER 60 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1986:5249 CAPLUS
DN 104:5249
TI Conformational studies of some bicyclo[3.3.1]nonan-9-ones using dipole moments and PMR spectra
AU Pandiarajan, K.; Stalin, K. K.
CS Dep. Chem., Annamalai Univ., Annamalainagar, 608 002, India
SO Indian J. Chem., Sect. B (1985), 24B(5), 565-7
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
GI



AB Dipole moments of 2,4-diphenyl-3-azabicyclo[3.3.1]nonan-9-one (I), 2,4,6,8-tetraphenyl-3-thia-7-azabicyclo[3.3.1]nonan-9-one [II; X = S(III)]and 2,4,6,8-tetraphenyl-3-azabicyclo[3.3.1]nonan-9-one [II; X = CH2(IV)] detd. in dioxane, indicate that the N-contg. ring is in the chair form in I, but in the boat form in III and IV; the N atom lone pair in these compds. is in the flagpole position. The 1H NMR of I indicates chair conformation for the cyclohexane ring. The 1H NMR of 2,4,6,8-tetraphenyl-3,7-diazabicyclo[3.3.1]nonan-9-one (II; X = NH) and III show chair-boat structure for these compds.

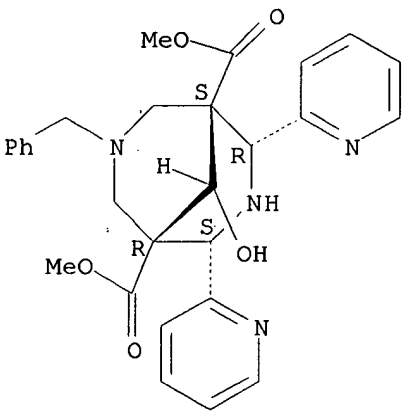
IT **37123-09-4**
RL: PRP (Properties)
(conformation of, dipole moment in relation to)

RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



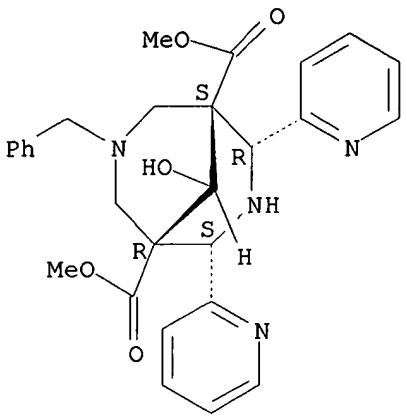
L13 ANSWER 61 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1985:453976 CAPLUS
DN 103:53976
TI Reductions of substituted 3,7-diaza- and 3-thia-7-azabicyclo[3.3.1]nonan-9-ones with sodium borohydride
AU Haller, Rolf; Ashauer, Ulrike
CS Pharm. Inst., Univ. Kiel, Kiel, 2300/1, Fed. Rep. Ger.
SO Arch. Pharm. (Weinheim, Ger.) (1985), 318(5), 405-10
CODEN: ARPMAS; ISSN: 0365-6233
DT Journal
LA German
OS CASREACT 103:53976
GI For diagram(s), see printed CA Issue.
AB Redn. of bicyclononanones I (X = NH, R1 = Ph, 2-pyridyl, R2 = Me; X = NH, R1 = 2-pyridyl, R2 = CH2Ph; X = S, R1 = 2-pyridyl, R2 = Me) with NaBH4 in aq. dioxane was highly stereoselective, to give the axial bicyclononanols II (R3 = OH, R4 = H). In MeOH, NaBH4 redn. gave mixts. of epimers II (R3 = OH, R4 = H; R3 = H, R4 = OH).
IT **36332-85-1P 97323-52-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by redn. of oxo analog with sodium borohydride)
RN 36332-85-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-hydroxy-7-(phenylmethyl)-2,4-di-2-pyridinyl-, dimethyl ester, (endo,endo,syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



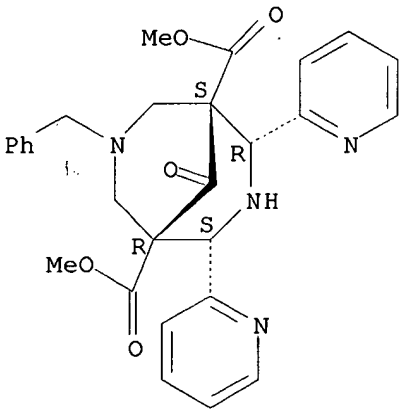
RN 97323-52-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-hydroxy-7-(phenylmethyl)-2,4-di-2-pyridinyl-, dimethyl ester, (endo,endo,anti)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

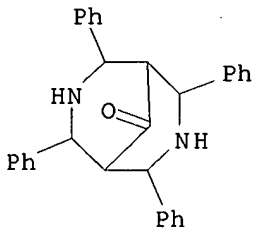


IT **97323-46-1**
RL: RCT (Reactant)
(redn. of, with sodium borohydride, stereochem. in relation to solvent)
RN 97323-46-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-oxo-7-(phenylmethyl)-2,4-di-2-pyridinyl-, dimethyl ester, (endo,endo)- (9CI) (CA INDEX NAME)

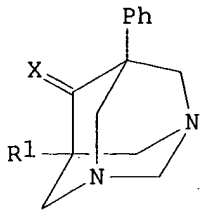
Relative stereochemistry.



L13 ANSWER 62 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1984:570576 CAPLUS
DN 101:170576
TI 2,6-Diphenylpiperidine systems - a PMR spectral study
AU Sivasubramanian, S.; Sundharavadivelu, M.; Arumugam, N.
CS Dep. Org. Chem., Madurai Kamaraj Univ., Madurai, 625 021, India
SO Indian J. Chem., Sect. B (1984), 23B(3), 280-1
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
AB 1H NMR spectral data of compds. contg. 2,6-diphenylpiperidine moiety in the form of a monocyclic system or forming a part of fused bi-, tri- or tetracyclic ring structure show that the Ph groups attached to the carbon adjacent to the nitrogen, be it simple or simplex systems in which this moiety is embedded, exhibit the characteristic broad arom. proton signals with concurrent multiplicity due to nitrogen lone pair anisotropic effect.
IT **37123-09-4**
RL: PRP (Properties)
(NMR of)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



L13 ANSWER 63 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1984:423422 CAPLUS
DN 101:23422
TI Synthesis and transformations of polyhedral compounds. V. Synthesis and cyclization of some 3,7-diacyl-3,7-diazabicyclo[3.3.1]nonanes
AU Agadzhanyan, Ts. E.; Arutyunyan, G. L.
CS Inst. Tonk. Org. Khim., Yerevan, USSR
SO Arm. Khim. Zh. (1983), 36(11), 730-4
CODEN: AYKZAN; ISSN: 0515-9628
DT Journal
LA Russian
GI



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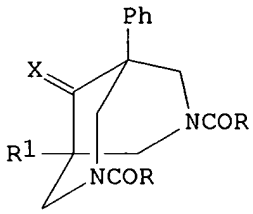
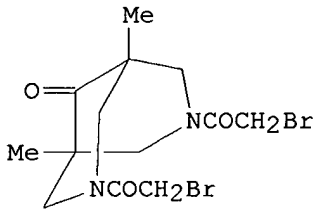
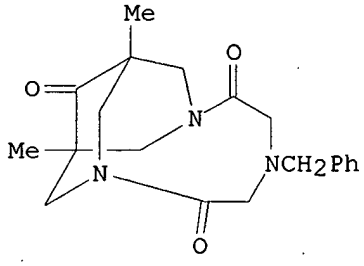


II

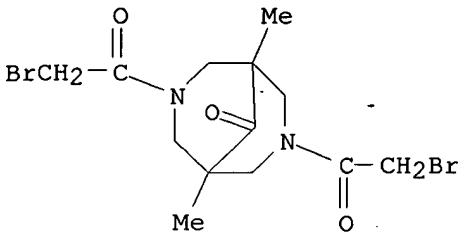


III

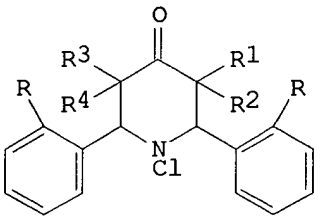


IV

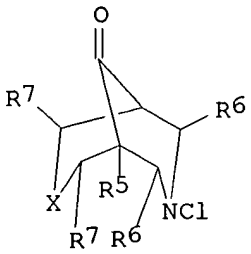
AB Ring cleavage of diazaadamantane I (R1 = Ph, X = O) by RCOCl (R = phthalimidomethyl, p-O2NC6H4, BrCH2) gave 46-56% diazabicyclononanes II. Similar ring cleavage of I (R1 = NO2, X = Me2) by Ac2O, TsCl, and RCOCl gave 15-67% of the corresponding II. Intramol. cyclization of III by PhCH2NH2 gave 51% IV.
IT **80808-87-3**
RL: RCT (Reactant)
(intramol. cyclocondensation of, by benzylamine)
RN 80808-87-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-bis(bromoacetyl)-1,5-dimethyl- (9CI) (CA INDEX NAME)



L13 ANSWER 64 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1984:191700 CAPLUS
DN 100:191700
TI Synthesis and PMR spectral analysis of some N-chloropiperidin-4-ones and N-chloroazabicyclo[3.3.1]nonan-9-ones
AU Ganapathy, K.; Vijayan, B.
CS Dep. Chem., Annamalai Univ., Annamalainagar, 608 002, India
SO J. Indian Chem. Soc. (1983), 60(6), 572-4
CODEN: JICSAH; ISSN: 0019-4522
DT Journal
LA English
GI



I

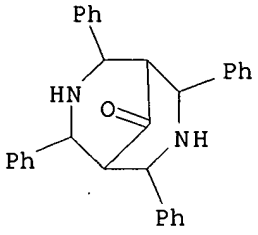


II

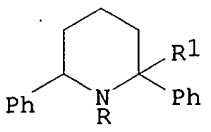
AB Chloropiperidinones I (R = H, Cl; R1 -R4 = H, Me Et, Me2CH, Bu, Ph) and chloroazabicyclo[3.3.1]nonan-9-ones II (X = CH2, CIN; R5 = H, Me, R6 = Ph, 2-ClC6H4, R7 = H, Ph) were prepd. and are good oxidizing agents. NMR spectra of I show a chair conformation. II except II (X = NCI, R5= H, R6 = R7 = Ph) have a twin-chair conformation; the exception has a chair-boat conformation. The equatorial H in I absorbs at higher field than the axial proton and the equatorial Me protons absorb at higher field than the axial Me protons. The equatorial Me group at C-3 or C-5 shields the vicinal axial H at C-2 or C-6 and the axial Me group at C-3 deshields the axial H at C-2. These effects were also seen in II.

IT **37123-09-4**
RL: RCT (Reactant)
(chlorination of)

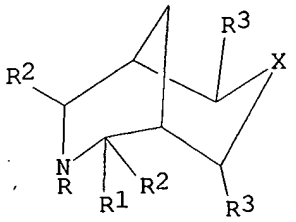
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



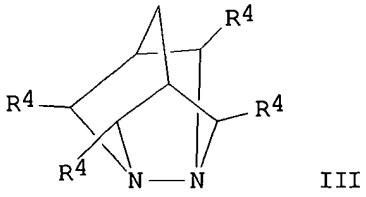
L13 ANSWER 65 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1984:34525 CAPLUS
DN 100:34525
TI N-Chlorination and dehydrochlorination of aryl-substituted piperidines, 3-azabicyclo[3.3.1]nonanes, and 3,7-diazabicyclo[3.3.1]nonanes. Synthesis of the first 3,7-diazanoradamantane
AU Quast, Helmut; Mueller, Bodo
CS Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.
SO Chem. Ber. (1983), 116(12), 3931-46
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA German
GI



I



II

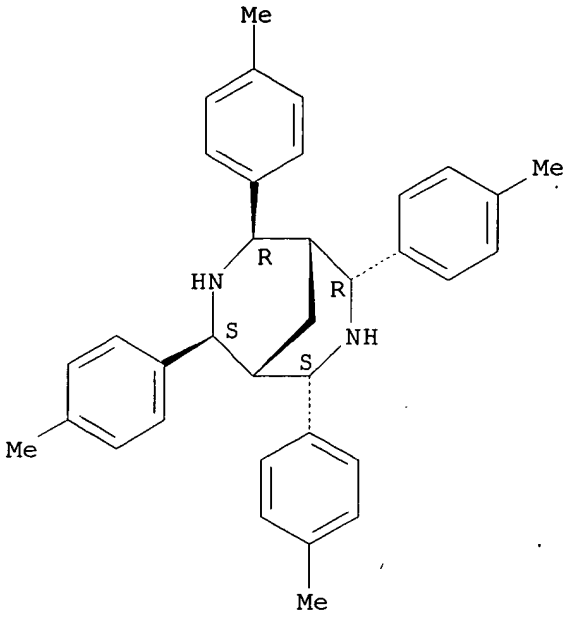


III

AB N-Chloropiperidine derivs. I and II (R = Cl, R1 = H, R2 = Ph, 4-ClC6H4, 4-MeC6H4; R3 = H, Ph, 4-MeC6H4; X = CH2, N+H2.Cl-, NCl) were obtained by chlorination using Me3COCl. Dehydrochlorination of I and II (R - R3 as above; X = CH2) gave I and II (RR1 = bond). However, dehydrochlorination of II (R = Cl, R1 = H, R2 = R3 = 4-MeC6H4, X = NCl) gave 2,6-bis(4-methylphenyl)pyridine. Surprisingly, the spontaneous dehydrochlorination of chlorodiazabicyclo[3.3.1]nonane II (R = Cl, R1 = H, R2 = R3 = 4-MeC6H4, X = N+H2.Cl-) produced the highly strained 3,7-diazanoradamantane III (R4 = 4-MeC6H4). Its structure was assigned on the basis of high field 1H and 13C NMR spectra, nuclear Overhauser difference spectroscopy, and the temp. dependence of the 1H and 13C NMR spectra resulting from slow rotation of the 4-MeC6H4 groups. The barrier of rotation for the 1,3-diaxial oriented 4-MeC6H4 groups at C-6,8 was .DELTA.G247.thermod. = 50 .+-. 1 kJ.cntdot.mol-1.

IT **75549-49-4**
RL: RCT (Reactant)
(chlorination of)
RN 75549-49-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetrakis(4-methylphenyl)-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.


Me
Me
R
HN
R
S
NH
S
Me
Me

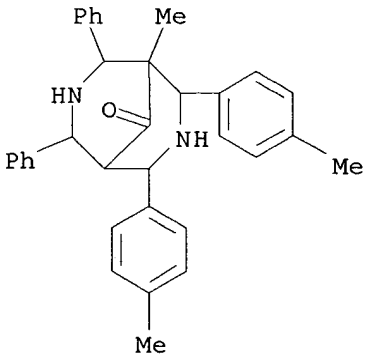
L13 ANSWER 66 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1983:612473 CAPLUS
DN 99:212473
TI Synthesis of spiro[2H-1,3-benzoxazine-2,4'-piperidines] from N,N'-dibenzylidenephenylmethanediamines and 2,6-diaryl-4-piperidones
AU Takajo, Tokiharu; Kambe, Satoshi
CS Coll. Technol., Oyama Natl. Coll. Technol., Oyama, 323, Japan
SO Synthesis (1983), (7), 564-6
CODEN: SYNTBF; ISSN: 0039-7881
DT Journal
LA English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Spiro[benzoxazine-piperidines] I (R = H, Cl; R1 = H, Me) were obtained in 52-58% yield by treating [5,2-R(HO)C6H3CH:N]2CHC6H3(OH)R-2,5 (II) with piperidinones III (R2 = R3 = Me, R4 = H). Treatment of II with III (R1 = R2 = H, R3 = R4 = Ph) gave imines IV. Diazabicyclononanones V (R1 = Me, R5 = H; R1 = H, R5 = Me) were obtained by treating (4-R5C6H4CH:N)2CHC6H4R5-4 (VI) with III (R1 = H, Me, R2 = R3, H, R4 = Me). Pyridopyrimidines VII were obtained from VI and III (R1 = H, Me, R2 = R3 = Me, R4 = H).

IT **87731-90-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 87731-90-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4-bis(4-methylphenyl)-6,8-diphenyl- (9CI) (CA INDEX NAME)

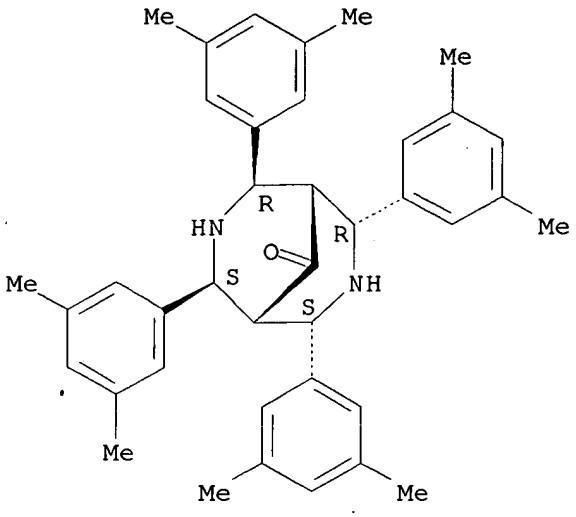


L13 ANSWER 67 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1983:52782 CAPLUS
DN 98:52782
TI Crystal and molecular structure of tetraaryl-3,7-diazabicyclo[3.3.1]nonanes and tetra- and pentaaryl-1,3-diazaadamantanes. Chair-boat conformation of the tetraaryl-3,7-diazabicyclo[3.3.1]nonanes
AU Quast, Helmut; Mueller, Bodo; Peters, Eva Maria; Peters, Karl; Von Schnering, Hans Georg
CS Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.
SO Chem. Ber. (1982), 115(11), 3631-52
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA German
GI

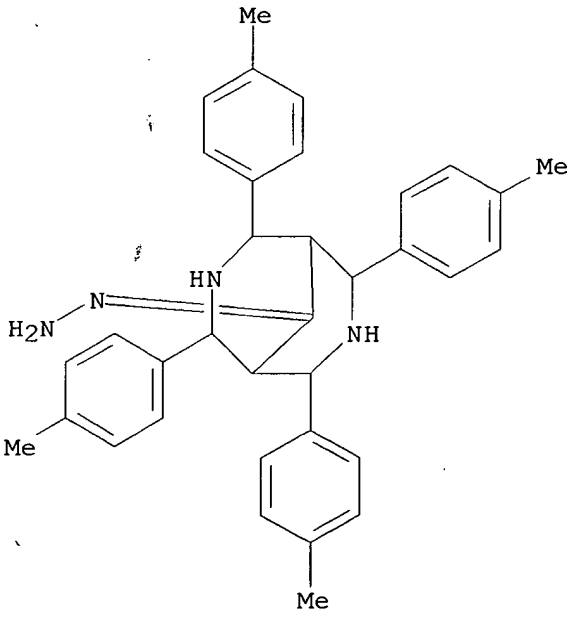
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Mannich reaction of 3,5-(Me3C)2C6H3CHO gave diarylpiperidinone I, while similar treatment of 3,5-Me2C6H3CHO gave diazabicyclononanone II (R = 3,5-xylyl, R1 = H) directly, along with diazaadamantanone III (R = 3,5-xylyl). Similarly, III (R = 4-tolyl) was isolated in the prepn. of II (R = 4-tolyl, R1 = H) (IV). Methylation of IV with MeI in refluxing Me2CO/C6H6 contg. K2CO3 gave II (R = 4-tolyl, R1 = Me); Wolff-Kishner redn. of IV gave V (R = 4-tolyl, R1 = H), which was monomethylated to give V (R = 4-tolyl, R1 = Me), regioselectively. X-ray anal. of II (R = 3,5-xylyl, R1 = H; R = 4-tolyl, R1 = Me), III, V (R = 4-tolyl, R1 = Me) and the diazaadamantanone VI gave the structures and preferred conformations, esp. those of the aryl groups, in the cryst. state. All tetraaryl-3,7-diazabicyclononanones exist in the chair-boat conformation with equatorial aryl groups. Two of the 5 aryl substituents in III occupy a 1,3-diaxial position, while the 3 neighboring aryl groups exhibit an unexpected propeller-like arrangement.
IT **83097-72-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and crystal and mol. structure of)
RN 83097-72-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(3,5-dimethylphenyl)-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

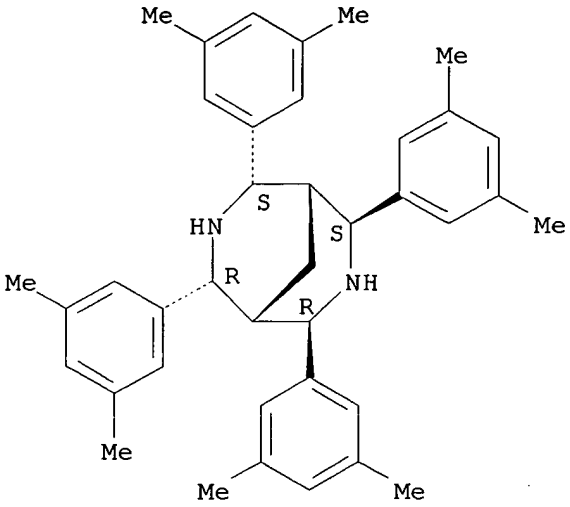


IT **75541-41-2P 83116-06-7P 84182-80-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 75541-41-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-, hydrazone, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

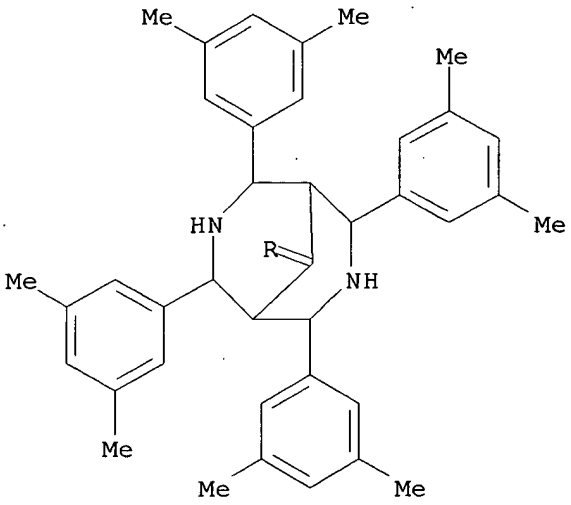


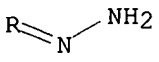
RN 83116-06-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetrakis(3,5-dimethylphenyl)-, (1.alpha.,2.alpha.,4.alpha.,5.alpha.,6.beta.,8.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 84182-80-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(3,5-dimethylphenyl)-, hydrazone, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)





L13 ANSWER 68 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1983:16738 CAPLUS
DN 98:16738
TI Bispidine derivatives and pharmaceutical compositions containing them
IN Binnig, Fritz; Mueller, Claus D.; Raschack, Manfred; Von Philipsborn, Gerda
PA BASF A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 9 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

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	FI 71146	C	19861124		
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	NO 157452	C	19880323		
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	DK 157813	B	19900219		
	DK 157813	C	19900716		
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	HU 185516	B	19850228		
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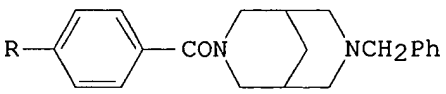
	DK 8201498	A	19821003	DK 1982-1498	19820401
	ZA 8202269	A	19830223	ZA 1982-2269	19820401
	US 4556662	A	19851203	US 1983-537838	19830930
PRAI	DE 1981-3112055		19810327		
	DE 1981-3113389		19810402		
	US 1982-354515		19820303		
	EP 1982-102271		19820319		

GI



I

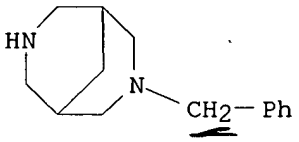
AB Bispidines I (R = H, NH2) were prepd. Thus N-benzylbispidine was treated

with 4-O2NC6H4COCl to give 82.5% I (R = NO2) which was hydrogenated on Pt-C to give 81% I (R = NH2).

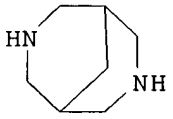
IT **69407-32-5**
RL: RCT (Reactant)
(benzoylation of)

RN 69407-32-5 CAPLUS

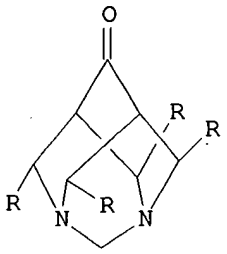
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)



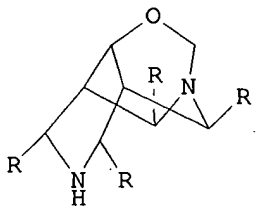
L13 ANSWER 69 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1982:615139 CAPLUS
DN 97:215139
TI Conformational and configurational studies on 3-azabicyclo[3.3.1]nonane (3-ABN) derivatives and related systems employing carbon-13 NMR spectroscopy
AU Jeyaraman, R.; Jawaharsingh, Cooksley Baldwin; Avila, S.; Ganapathy, K.; Eliel, Ernest L.; Manoharan, Muthiah; Morris-Natschke, Susan
CS Dep. Chem., Am. Coll., Madurai, 625002, India
SO J. Heterocycl. Chem. (1982), 19(3), 449-58
CODEN: JHTCAD; ISSN: 0022-152X
DT Journal
LA English
AB The 13C NMR of four cis-2,4-diphenyl-3-azabicyclo[3.3.1]nonanes, eleven cis-2,4-diaryl-3-azabicyclo[3.3.1]nonan-9-ones, twenty-six cis-2,4-diaryl-3-azabicyclo[3.3.1]nonan-9-ols or acetates, five cis-2,4-diaryl-3-azabicyclo[4.3.1]decan-10-ones or -10-ols and five cis-2,4-diphenyl-3-aza-7-thiabicyclo[3.3.1]nonan-9-ones, -9-ols of 9-yl acetates are obsd. Except for the 7-thia compds., which exist mainly in the configuration and conformation with the N atom-contg. ring in the boat form, these compds. exist overwhelmingly in chain-chair conformations. The configuration of the 9-ols and their acetates (syn or anti to the N-atom-contg. ring) is detd. from the spectra. In several cases, the structure assigned differ from those made earlier. Broadening of one set of aryl signals (probably those due to the o-C atoms) in the case of N-Me (but not N-H) compds. without ortho substituents is due to restricted Ph rotation.
IT **280-74-0**
RL: PRP (Properties)
(carbon-13 NMR of, conformation and configuration in relation to)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



L13 ANSWER 70 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1982:562202 CAPLUS
DN 97:162202
TI Conformation in solution of tetraaryl-3,7-diazabicyclo[3.3.1]-nonanes and tetra- and pentaaryl-1,3-diazaadamantanes. A nuclear magnetic resonance study
AU Jackman, Lloyd M.; Dunne, Theresa S.; Mueller, Bodo; Quast, Helmut
CS Dep. Chem., Pennsylvania State Univ., University Park, PA, 16802, USA
SO Chem. Ber. (1982), 115(8), 2872-91
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA English
GI



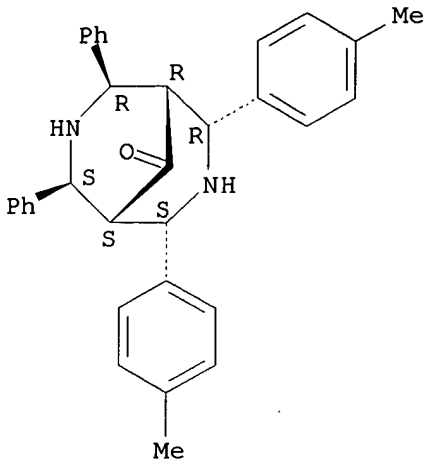
I



II

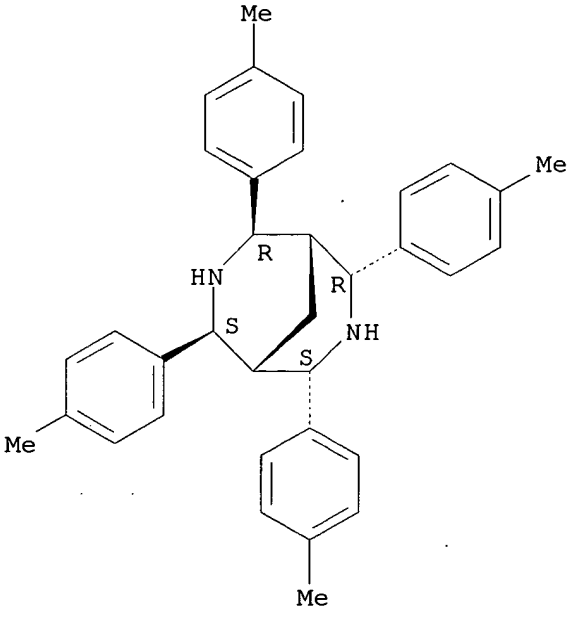
AB The proton NMR spectra of a series of tetraaryl-3,7-diazabicyclo[3.3.1]nonanes, have been assigned with the aid of nuclear Overhauser difference spectroscopy. The NOE's together with spin lattice relaxation times show that these mols. adopt the chair-boat conformation with all aryl groups being equatorial. This conformation and the torsional angles of the aryl groups are similar to those found in the solid state. Analogous studies have been carried out with tetra- and pentaaryl-1,3-diazaadamantanes. A surprisingly low barrier of rotation (I; R = 3,5-Me2C6H3: .DELTA.G.+-.298 = 42 kJ.cntdot.mol-1) has been found for the two 1,3-diaxially oriented aryl groups in these systems;carbon-13 chem. shift data are reported for the above compds. Those of the 3,7-diazabicyclononanes are consistent with tne proposed chair-boat conformation; nitrogen-15 chem. shift data and 13C-15N coupling consts. are also in accord with this conformation. A stereoselective redn. of I (R = 3,5-Me2C6H3) to the corresponding alc. and the ready acid-catalyzed rearrangement of this alc. to II (R as above), the first example of the 9-oxa-1,5-diazatricyclo[5.3.1.33,8]undecane ring system, is described.
IT **75541-45-6 75549-49-4 75549-52-9**
83097-72-7 83116-06-7
RL: PRP (Properties)
(conformation of, NMR in relation to)
RN 75541-45-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(4-methylphenyl)-6,8-diphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



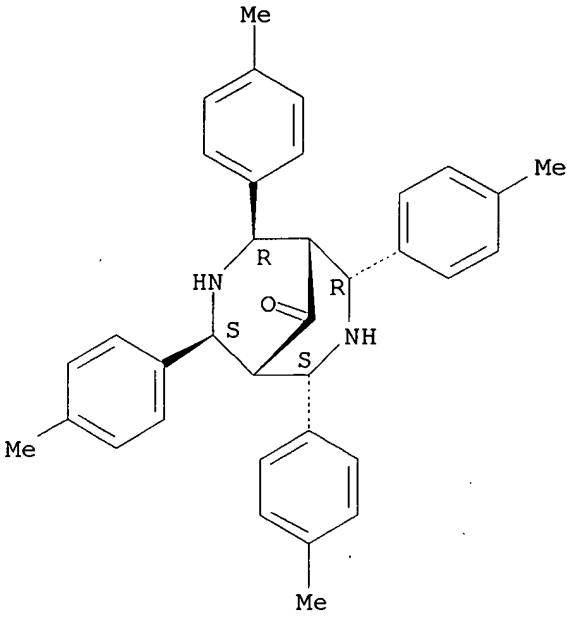
RN 75549-49-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetrakis(4-methylphenyl)-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



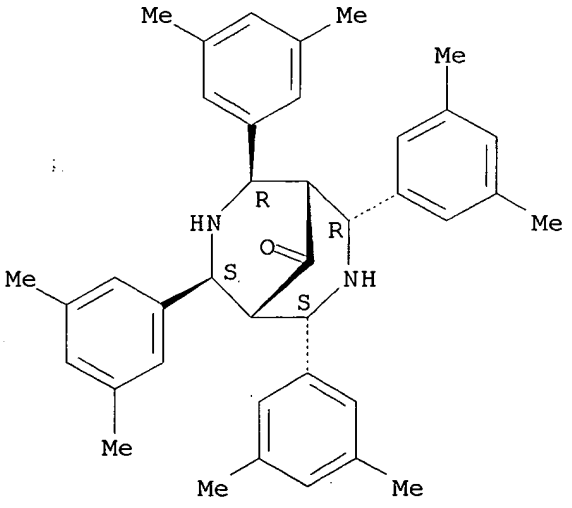
RN 75549-52-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



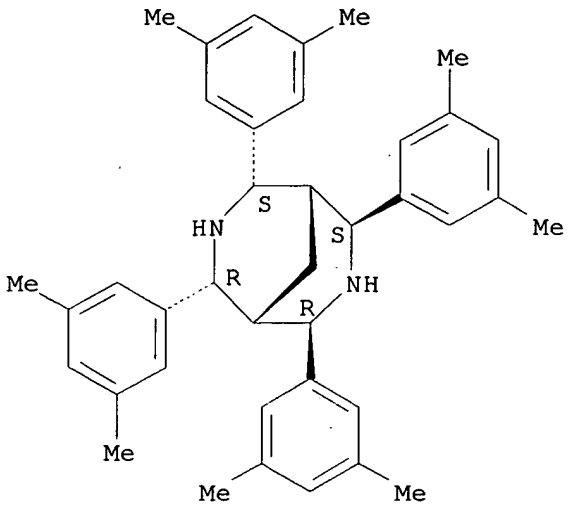
RN 83097-72-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(3,5-dimethylphenyl)-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 83116-06-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetrakis(3,5-dimethylphenyl)-, (1.alpha.,2.alpha.,4.alpha.,5.alpha.,6.beta.,8.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.


Me
Me
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HN
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R
NH
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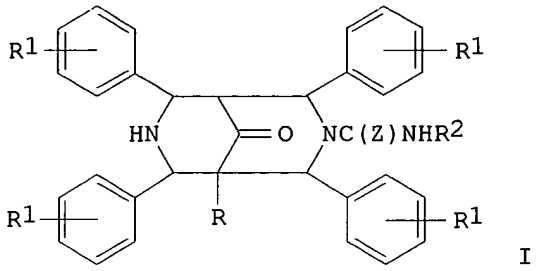
R
Me
Me
Me

L13 ANSWER 71 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1982:406193 CAPLUS
DN 97:6193
TI Synthesis and pharmacological properties of 2,4,6,8-tetraphenylbispidin-9-ones
AU Ribalta, Miguel; Ribas, Jose Maria; Martinez Tobed, Antonio; Basi, Nuria; Zapatero, Jorge; Bruseghini, Leonida
CS Cent. Invest. Quim.-Farm., Invest. Tec. Apl. S.A., Barcelona, Spain
SO Eur. J. Med. Chem. - Chim. Ther. (1982), 17(2), 187-90
CODEN: EJMCA5; ISSN: 0009-4374
DT Journal
LA English
GI

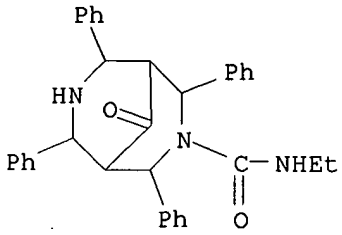


I

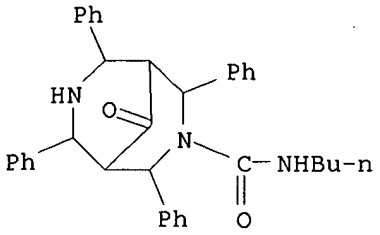
AB Bispidinones I (R = H, Me; R1 = H, 4-OMe, 2-Cl, 4-Cl; R2 = Et, Bu, CMe3, cyclohexyl, allyl, PhCH2; Z = O, S) were prepd. by N-carbamoylation; the compds. prepd. showed anticonvulsant, anticataleptic, myorelaxant, antidepressant, and antiulcer activity. 2,4,6,8-Tetraphenylbispidin-9-one was heated with BuNCO in CHCl3 to give I (R = R1 = H, Z = O, R2 = Bu).

IT **82058-25-1P 82058-26-2P 82058-27-3P**
82058-28-4P 82058-29-5P 82058-30-8P
82058-31-9P 82058-32-0P 82058-33-1P
82058-34-2P 82058-35-3P 82058-36-4P
82058-37-5P 82058-38-6P 82058-39-7P
82058-40-0P 82058-41-1P 82058-42-2P
82058-43-3P 82058-44-4P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and pharmacol. activity of)

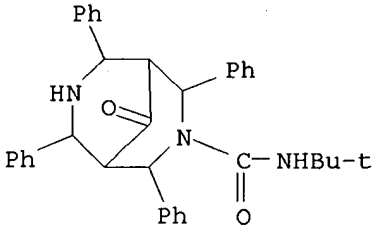
RN 82058-25-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



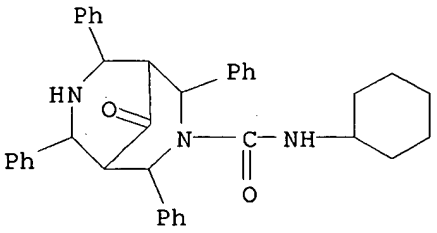
RN 82058-26-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-butyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



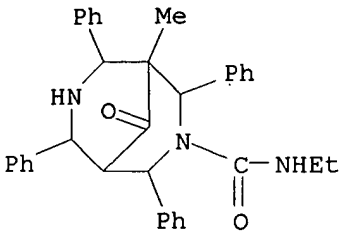
RN 82058-27-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(1,1-dimethylethyl)-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



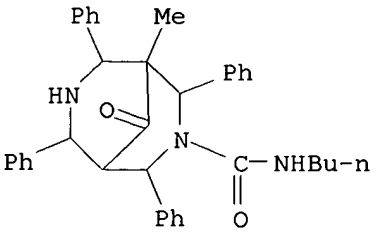
RN 82058-28-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-cyclohexyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



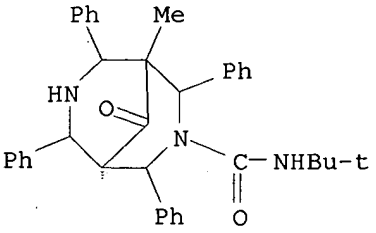
RN 82058-29-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl-1-methyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



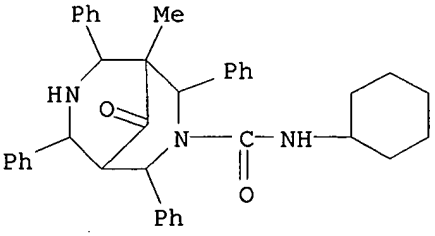
RN 82058-30-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-butyl-1-methyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



RN 82058-31-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-(1,1-dimethylethyl)-1-methyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)

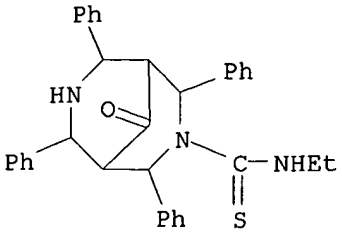


RN 82058-32-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-cyclohexyl-1-methyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)

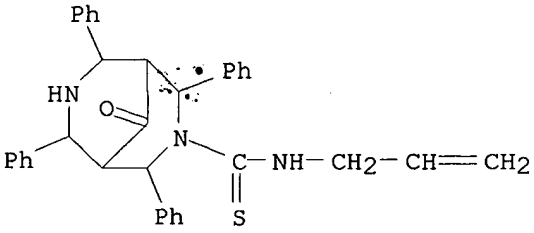


RN 82058-33-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, N-ethyl-9-oxo-2,4,6,8-

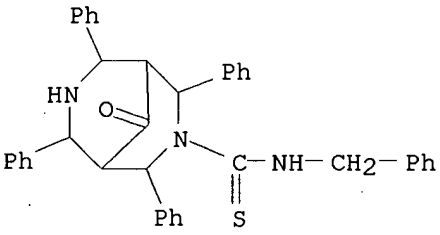
tetraphenyl- (9CI) (CA INDEX NAME)



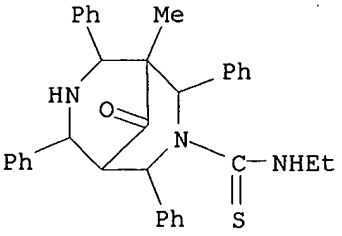
RN 82058-34-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, 9-oxo-2,4,6,8-tetraphenyl-N-2-propenyl- (9CI) (CA INDEX NAME)



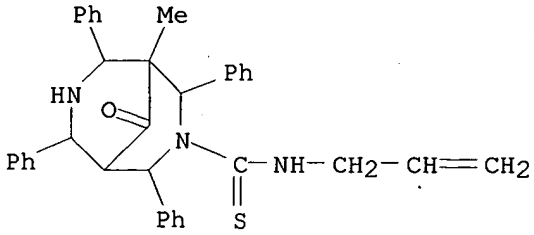
RN 82058-35-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, 9-oxo-2,4,6,8-tetraphenyl-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



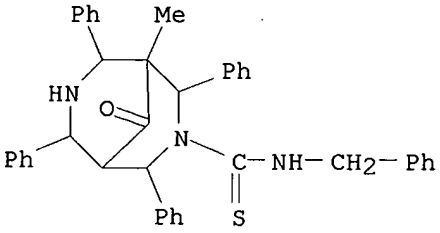
RN 82058-36-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, N-ethyl-1-methyl-9-oxo-2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



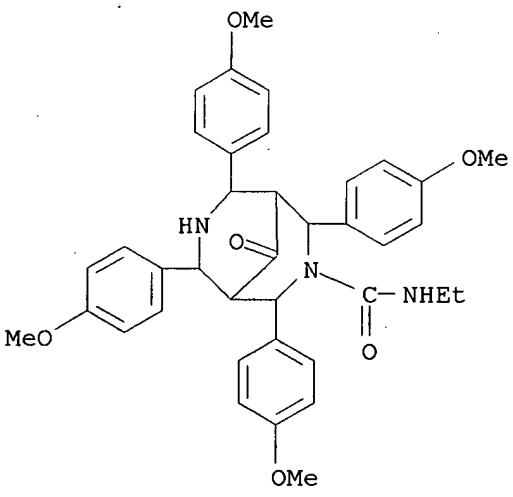
RN 82058-37-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, 1-methyl-9-oxo-2,4,6,8-tetraphenyl-N-2-propenyl- (9CI) (CA INDEX NAME)



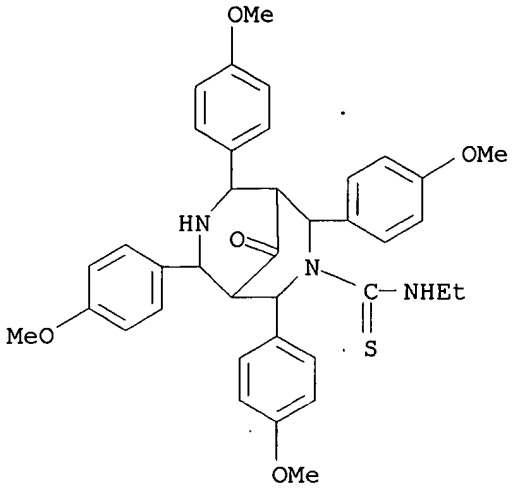
RN 82058-38-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, 1-methyl-9-oxo-2,4,6,8-tetraphenyl-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



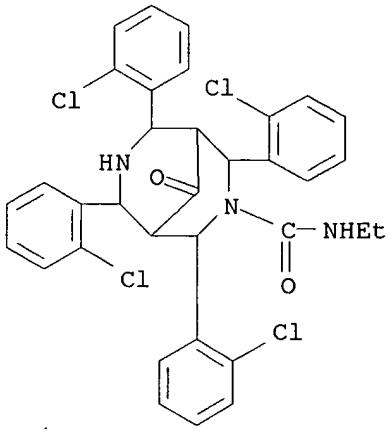
RN 82058-39-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, N-ethyl-2,4,6,8-tetrakis(4-methoxyphenyl)-9-oxo- (9CI) (CA INDEX NAME)



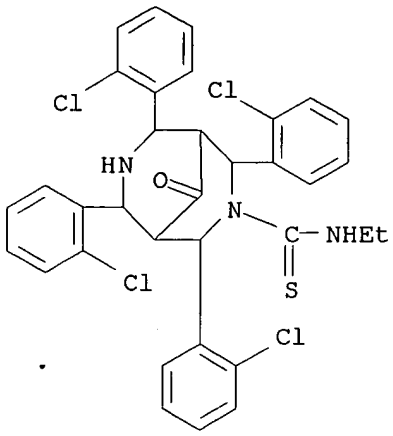
RN 82058-40-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, N-ethyl-2,4,6,8-tetrakis(4-methoxyphenyl)-9-oxo- (9CI) (CA INDEX NAME)



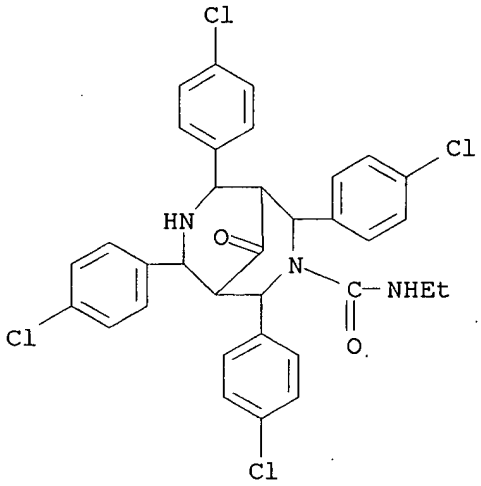
RN 82058-41-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 2,4,6,8-tetrakis(2-chlorophenyl)-N-ethyl-9-oxo- (9CI) (CA INDEX NAME)



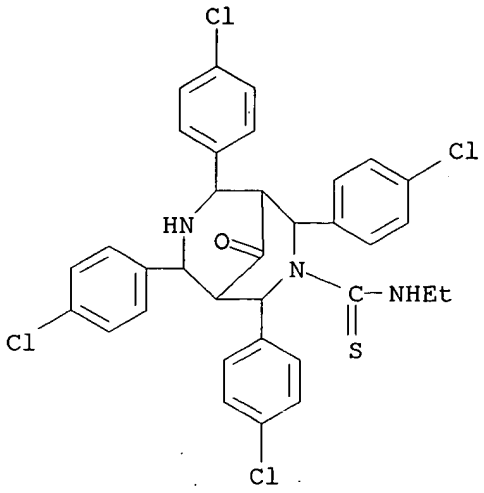
RN 82058-42-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, 2,4,6,8-tetrakis(2-chlorophenyl)-N-ethyl-9-oxo- (9CI) (CA INDEX NAME)



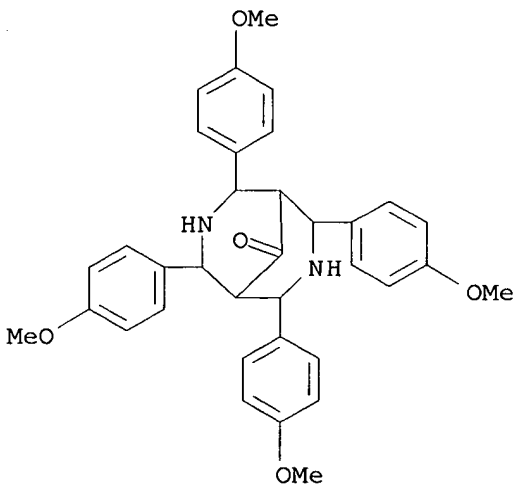
RN 82058-43-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carboxamide, 2,4,6,8-tetrakis(4-chlorophenyl)-N-ethyl-9-oxo- (9CI) (CA INDEX NAME)



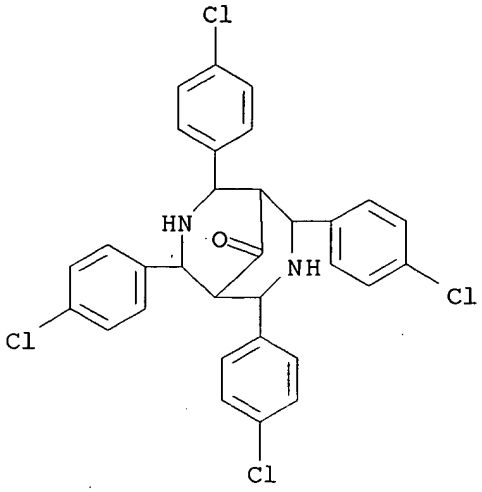
RN 82058-44-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3-carbothioamide, 2,4,6,8-tetrakis(4-chlorophenyl)-N-ethyl-9-oxo- (9CI) (CA INDEX NAME)



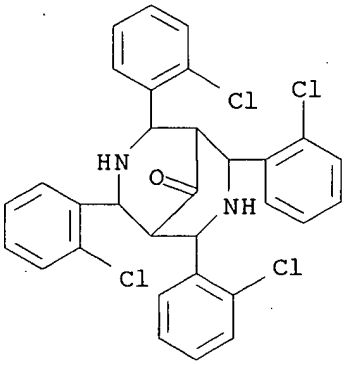
IT **55407-47-1 77737-97-4 82058-24-0**
RL: RCT (Reactant)
(N-carbamoylation of, by Et isocyanate and isothiocyanate)
RN 55407-47-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methoxyphenyl)-
(9CI) (CA INDEX NAME)



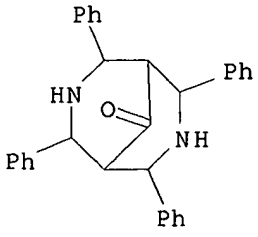
RN 77737-97-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-chlorophenyl)-
(9CI) (CA INDEX NAME)



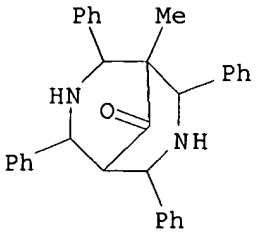
RN 82058-24-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(2-chlorophenyl)- (9CI) (CA INDEX NAME)



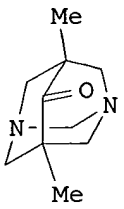
IT **37123-09-4 60823-94-1**
RL: RCT (Reactant)
(N-carbamoylation of, by org. isocyanates and isothiocyanates)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



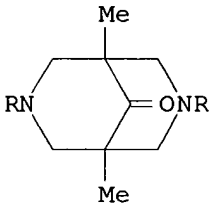
RN 60823-94-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



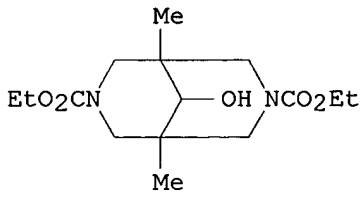
L13 ANSWER 72 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1982:104172 CAPLUS
DN 96:104172
TI Synthesis and reactions of polyhedral compounds. II. Synthesis of 5,7-dimethyl-1,3-diazaadamantan-6-one and -6-ol and their conversion into 3,7-diacyl(dicarbalkoxy, diarylsulfonyl)-3,7-diazabicyclo[3,3,1]nonanes
AU Agadzhanyan, Ts. E.; Arutyunyan, G. L.
CS Inst. Tonkoi Org. Khim. im. Mndzhoyana, Yerevan, USSR
SO Arm. Khim. Zh. (1981), 34(11), 963-8
CODEN: AYKZAN; ISSN: 0515-9628
DT Journal
LA Russian
GI



I

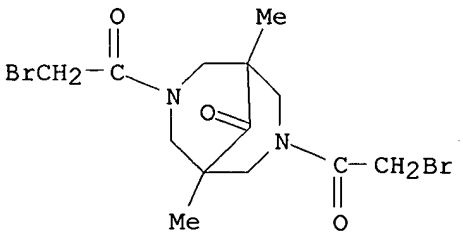


II

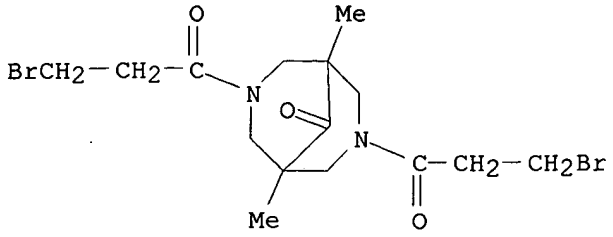


III

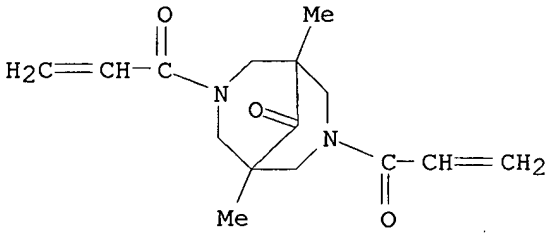
AB Cyclocondensation of EtCOEt, HCHO, and AcONH4 gave 19.5% I, which reacted with RCOCl, RO2CCl, or ArSO2Cl to give II [R = BrCH2CO, BrCH2CH2CO, CH2:CHCO, Bz, (phthalimidomethoxy)carbonyl, EtOCO, PhCH2OCO, 4-MeC6H4SO2, 4-(MeO2CNH)C6H4SO2]. LiAlH4 redn. of I gave 83.3% alc., which with ClCO2Et gave III.
IT **80808-87-3P 80808-88-4P 80808-89-5P**
80808-91-9P 80808-92-0P 80808-93-1P
80808-96-4P 80808-99-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 80808-87-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-bis(bromoacetyl)-1,5-dimethyl- (9CI) (CA INDEX NAME)



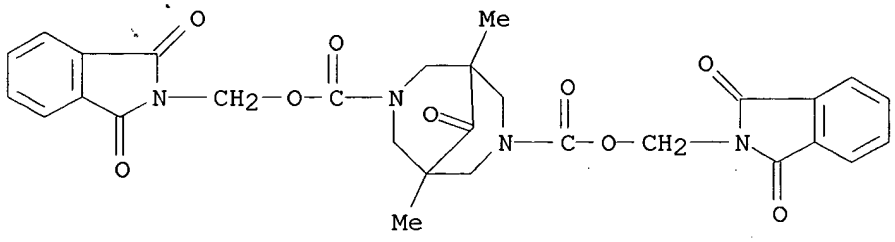
RN 80808-88-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 3,7-bis(3-bromo-1-oxopropyl)-1,5-dimethyl- (9CI) (CA INDEX NAME)



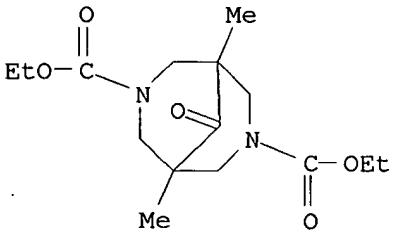
RN 80808-89-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-3,7-bis(1-oxo-2-propenyl)- (9CI) (CA INDEX NAME)



RN 80808-91-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 1,5-dimethyl-9-oxo-, bis[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl] ester (9CI) (CA INDEX NAME)

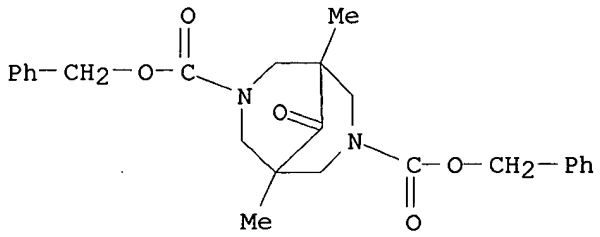


RN 80808-92-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 1,5-dimethyl-9-oxo-, diethyl ester (9CI) (CA INDEX NAME)

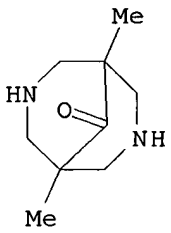


RN 80808-93-1 CAPLUS

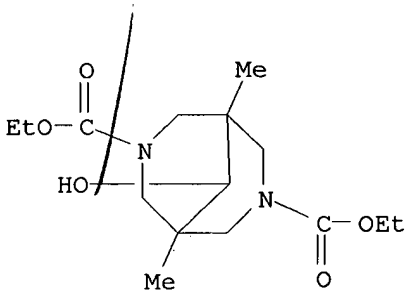
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 1,5-dimethyl-9-oxo-, bis(phenylmethyl) ester (9CI) (CA INDEX NAME)



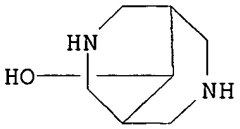
RN 80808-96-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl- (9CI) (CA INDEX NAME)



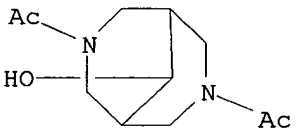
RN 80808-99-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-3,7-dicarboxylic acid, 9-hydroxy-1,5-dimethyl-, diethyl ester (9CI) (CA INDEX NAME)



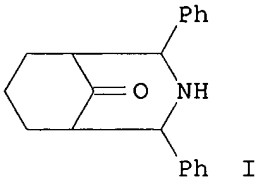
L13 ANSWER 73 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1981:497292 CAPLUS
DN 95:97292
TI Synthesis of 6-O-benzoyl-1,3-diazaadamantane
AU Aslanov, Kh. A.; Inoyatova, D. A.; Kosovskii, A. V.; Atabaev, R.
CS USSR
SO Sb. Nauch. Tr. Tashkent. Un-t (1979), (595), 83-6
From: Ref. Zh., Khim. 1981, Abstr. No. 7Zh217
DT Journal
LA Russian
AB Title only translated.
IT **78693-65-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and benzoylation of)
RN 78693-65-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol (6CI, 9CI) (CA INDEX NAME)



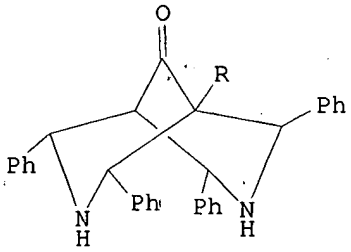
IT **78693-64-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deacetylation of)
RN 78693-64-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 3,7-diacetyl- (6CI, 9CI) (CA INDEX NAME)



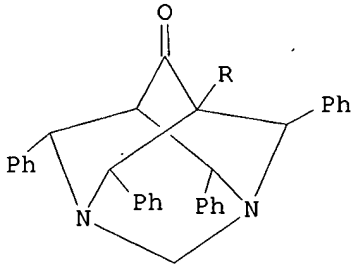
L13 ANSWER 74 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1981:425025 CAPLUS
DN 95:25025
TI Synthesis and reactions of ketones of 3-aza-, 3,7-diazabicyclononane and 3,7-diazaadamantane series
AU Omarov, T. T.; Baisalbaeva, S. A.; Gubasheva, A. Sh.
CS USSR
SO Tr. Inst. Khim. Nauk, Akad. Nauk Kaz. SSR (1980), 52, 147-70
CODEN: TIKNAG; ISSN: 0568-5087
DT Journal
LA Russian
GI



I



II

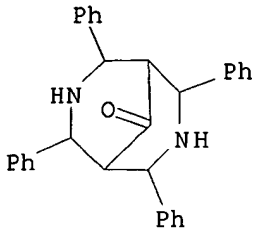


III

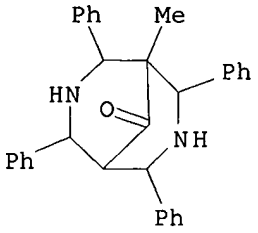
AB Condensation of cyclohexanone with BzH and H4NOAc gave a mixt. of diazabicyclononanone I and 2,6-dibenzylidenecyclohexanone. I was methylated. The diazabicyclononanes II (R = H, Me) were obtained by a similar condensation from the resp. piperidinone. The diazaadamantanes III were obtained from II by condensation with HCHO. III were reduced to alcs. I was converted to acetylenic alcs. Addnl. reactions of I, II and III were discussed. The conformation, spectra and biol. activity of I, II and III were discussed with 72 refs.

IT **37123-09-4P 60823-94-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclocondensation of, with formaldehyde, diazaadamantane from)

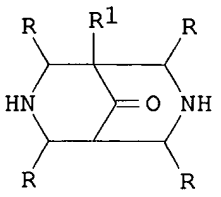
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)

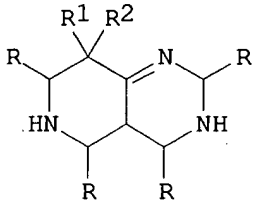


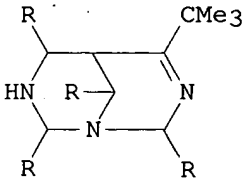
RN 60823-94-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



L13 ANSWER 75 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1981:406994 CAPLUS
DN 95:6994
TI 3,7-Diazabicyclo[3.3.1]nonan-9-ones, octahydropyrido[4,3-d]pyrimidines, and 1,3,7-triazabicyclo[3.3.1]non-3-enes from N,N'-dibenzylidenephenylmethanediamines and alkyl methyl ketones
AU Takajo, Tokiharu; Kambe, Satoshi
CS Oyama Tech. Coll., Tochigi, 323, Japan
SO Synthesis (1981), (2), 151-3
CODEN: SYNTBF; ISSN: 0039-7881
DT Journal
LA English
GI


I

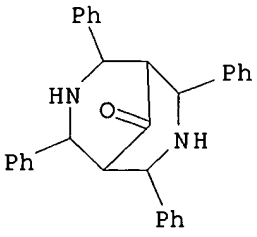

II


III

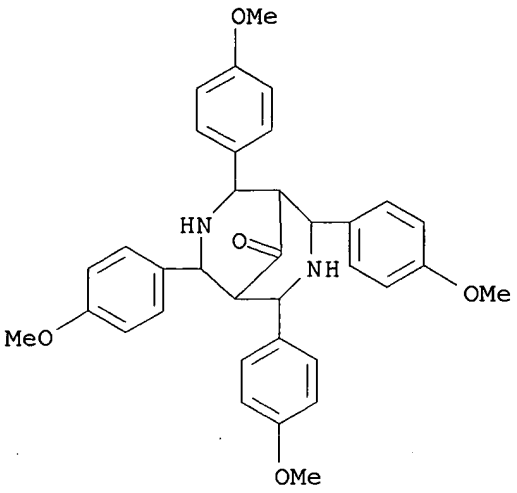
AB The cyclocondensation of RCH(N:CHR)2 (R = Ph, p-tolyl, 4-ClC6H4, 4-MeOC6H4) with MeCOCR1R2R3 [R1, R2, and R3 (same or different) are H or Me] gave the resp. diazabicyclononanones I, pyrido[4,3-b]pyrimidines II, and triazabicyclononenes III (from MeCOCMe3). A mixt. of PhCH(N:CHPh)2, MeCOEt, and NH4OAc in MeOH was stirred 2 days at room temp., kept 2 days, and worked up to give I (R = Ph, R1 = Me) and II (R = Ph, R1 = Me, R2 = H).

IT **37123-09-4P 55407-47-1P 60823-94-1P**
77737-96-3P 77737-97-4P 77841-40-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

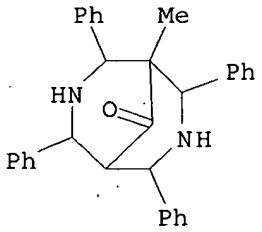
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



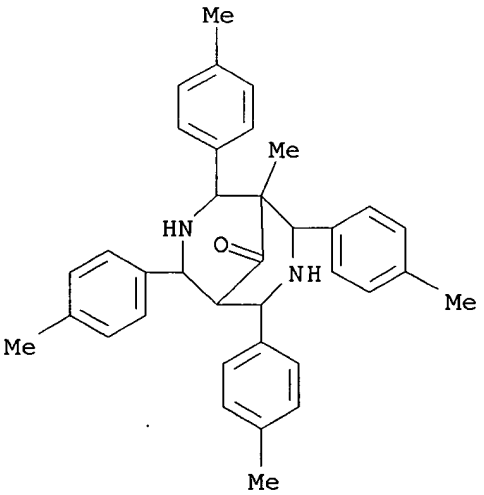
RN 55407-47-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



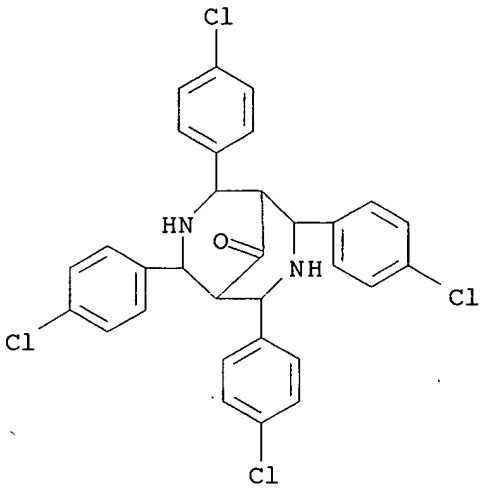
RN 60823-94-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



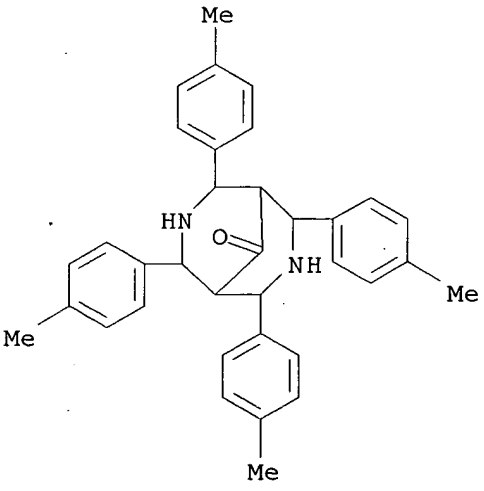
RN 77737-96-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetrakis(4-methylphenyl)- (9CI) (CA INDEX NAME)



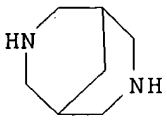
RN 77737-97-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-chlorophenyl)-
(9CI) (CA INDEX NAME)



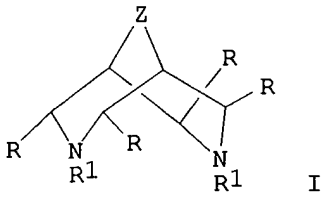
RN 77841-40-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-
(9CI) (CA INDEX NAME)



L48 ANSWER 76 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1981:156628 CAPLUS
DN 94:156628
TI Chemistry of 3-azabicyclo[3.3.1]nonanes
AU Jeyaraman, R.; Avila, S.
CS Dep. Chem., American Coll., Madurai, 625002, India
SO Chem. Rev. (1981), 81(2), 149-74
CODEN: CHREAY; ISSN: 0009-2665
DT Journal; General Review
LA English
AB A review with 339 refs.
IT **280-74-0D**, derivs.
RL: MSC (Miscellaneous)
(chem. of)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



L13 ANSWER 77 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1980:620339 CAPLUS
DN 93:220339
TI Stereochemistry of tetraaryl-3,7-diazabicyclo[3.3.1]nonanes and tetraaryl-1,3-diazaadamantanes
AU Quast, Helmut; Mueller, Bodo
CS Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.
SO Chem. Ber. (1980), 113(9), 2959-75
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA German
GI



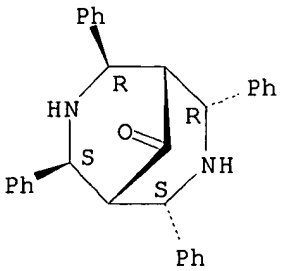
I

AB 2,4,6,8-Tetraaryl-3,7-diazabicyclo[3.3.1]nonanes I (Z = CH2, CO; R = Ph, p-tolyl; R1 = H) (II) were converted into the 1,3-diazaadamantanes (I; R12 = CH2) (III) by reaction with paraformaldehyde; II have the rel-(2S,4R,6R,8S)- configuration and III have the rel-(4R,8S,9R,10S)-configuration. The 1H NMR spectra show that II exist in the chair-chair conformation. The reaction of cis-2,6-diarylpiperidones with benzaldehydes yielded tetraaryldiazabicyclononanones in which the equatorial aryl groups of the piperidones prefer the axial positions in the diazabicyclononanones.

IT **65732-77-6P 75541-42-3P 75541-43-4P**
75541-44-5P 75541-45-6P 75549-49-4P
75549-52-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction with paraformaldehyde)

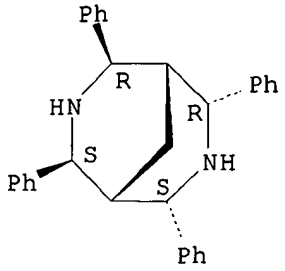
RN 65732-77-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



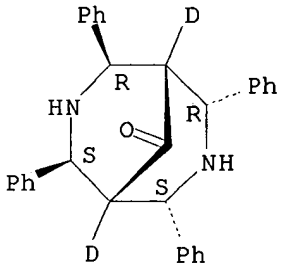
RN 75541-42-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetraphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

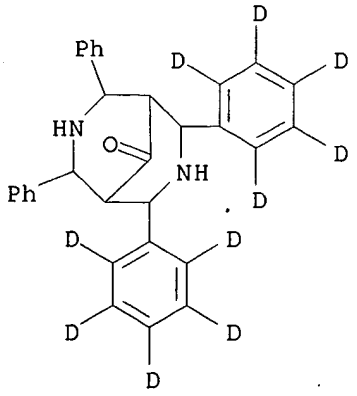


RN 75541-43-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one-1,5-d2, 2,4,6,8-tetraphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

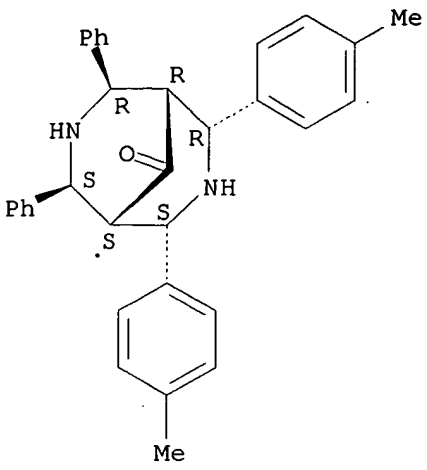


RN 75541-44-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-diphenyl-6,8-di(phenyl-d5)-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)



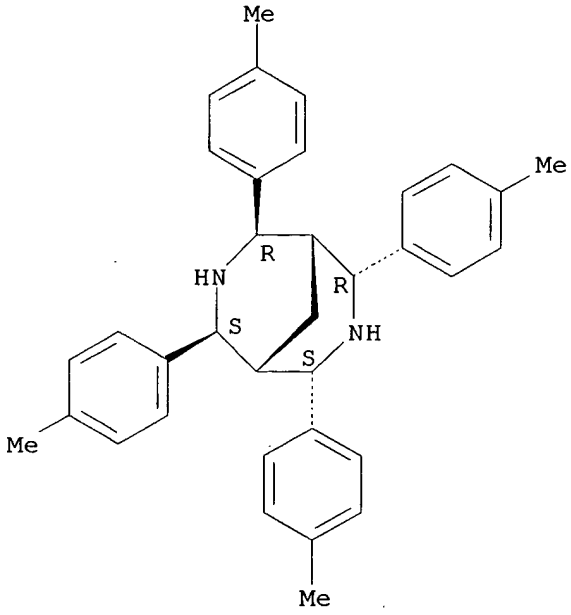
RN 75541-45-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(4-methylphenyl)-6,8-diphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



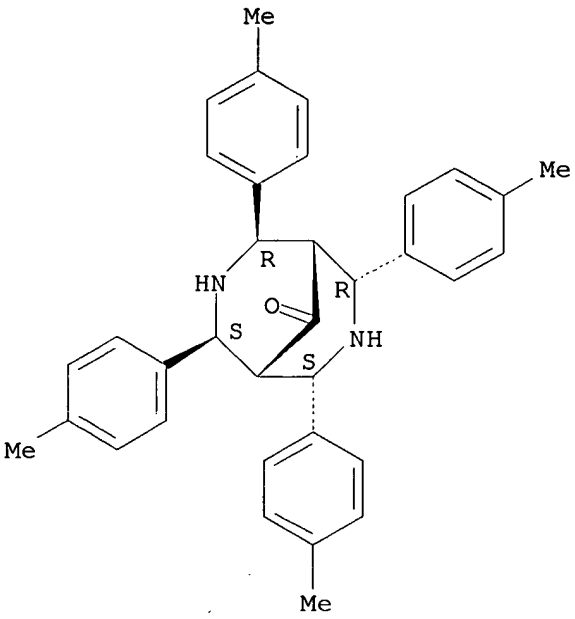
RN 75549-49-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetrakis(4-methylphenyl)-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

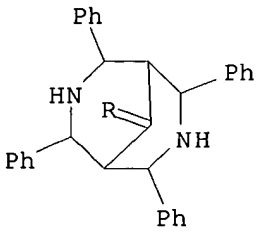


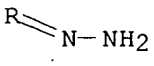
RN 75549-52-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

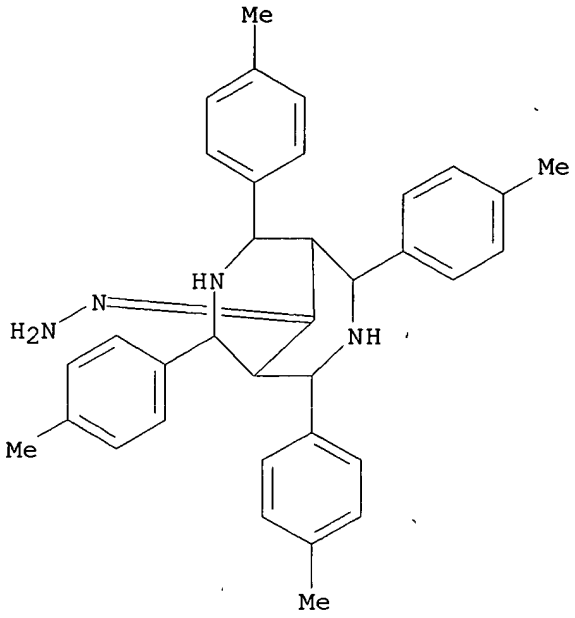


IT **75541-40-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and redn. of)
RN 75541-40-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, hydrazone, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

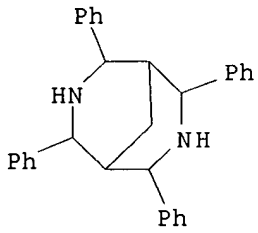




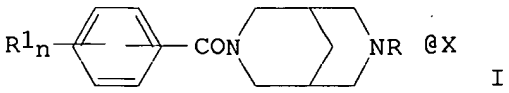
IT **75541-41-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 75541-41-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methylphenyl)-, hydrazone, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)



IT **75598-03-7**
RL: RCT (Reactant)
(reaction of, with paraformaldehyde)
RN 75598-03-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 2,4,6,8-tetraphenyl- (9CI) (CA INDEX NAME)



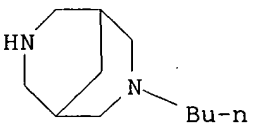
L13 ANSWER 78 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1979:501880 CAPLUS
DN 91:101880
TI Antiarrhythmic activity of some N-alkylbispidinebenzamides
AU Ruenitz, Peter C.; Mokler, Corwin M.
CS Sch. Pharm., Univ. Georgia, Athens, GA, 30602, USA
SO J. Med. Chem. (1979), 22(9), 1142-4
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI



I

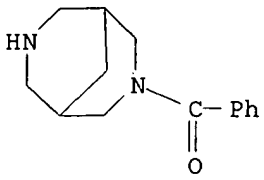
AB Nine bispidinebenzamides I (R = Me or Bu; R1 = H, OMe, or Cl; n = 1, 2, or 3; X = HCl or fumarate) were synthesized by condensation of N-methyl- [58324-99-5] or N-butylbispidine [**58325-01-2**] with the appropriate acid chlorides. The synthesized compds. were evaluated in mice for acute toxicity and their ability to protect against chloroform-induced ventricular fibrillation. All of them were active. I; R = Me, R1 = H, X = fumarate [70802-37-8], I; R = Me, R1 = 4-MeO, X = fumarate [70802-39-0], and I; R = Me, R1 = 4-Cl, X = fumarate [71004-34-7] had potencies and LD50-to-ED50 ratios comparable to those of disopyramide. However, their potencies in increasing the effective refractory period in isolated rabbit atria were considerably less than that of disapyramide.

IT **58325-01-2**
RL: BIOL (Biological study)
(condensation of, with Ph acid chlorides)
RN 58325-01-2 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl- (9CI) (CA INDEX NAME)



IT **70802-35-6DP**, derivs.
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antiarrhythmic activity of)
RN 70802-35-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-benzoyl- (9CI) (CA INDEX NAME)

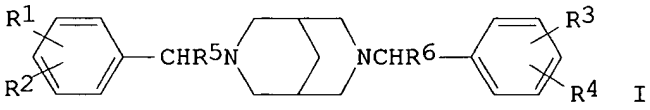
proviso



L18 ANSWER 79 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1979:121568 CAPLUS
DN 90:121568
TI Bispidine derivatives
IN Binnig, Fritz; Friedrich, Ludwig; Hofmann, Hans Peter; Kreiskott, Horst; Raschack, Manfred; Mueller, Claus
PA BASF A.-G., Ger.
SO Ger. Offen., 14 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2726571	A1	19781221	DE 1977-2726571	19770613
	JP 54012398	A2	19790130	JP 1978-68375	19780608
	FI 7801872	A	19781214	FI 1978-1872	19780612
	FI 63403	B	19830228		
	FI 63403	C	19830610		
	AT 7804265	A	19810215	AT 1978-4265	19780612
	AT 363937	B	19810910		
	EP 74	A1	19781220	EP 1978-100147	19780613
	EP 74	B1	19800806		
	R: BE, CH, DE, FR, GB, NL, SE				
	US 4183935	A	19800115	US 1978-915119	19780613
	CA 1105023	A1	19810714	CA 1978-305369	19780613
	AT 8003551	A	19810215	AT 1980-3551	19800708
	AT 363938	B	19810910		
PRAI	DE 1977-2726571		19770613		
	AT 1978-4265		19780612		

GI

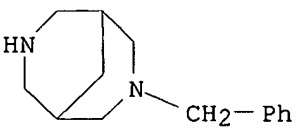


I

AB The bispidine derivs. I (R1-R4 = H, F, Cl, alkyl, alkoxy, F3C, NO2; R5, R6 = H, Ph) and their salts were prepd. Thus, N,N'-dibenzylbispidine was hydrogenated (Pd/C) to give monobenzylbispidine, which was treated with 3-ClC6H4CH2Cl to give I (R1 = Cl, R2-R6 = H). At 1-20 mg/kg I were antiarrhythmic, calcium antagonists, antiphlogistic, and antithrombic.

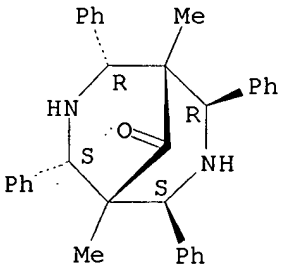
IT **69407-32-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and benzylation of)

RN 69407-32-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-(phenylmethyl)- (9CI) (CA INDEX NAME)

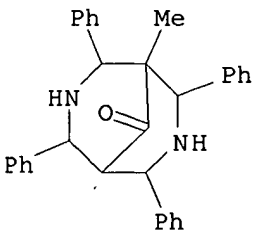


L13 ANSWER 80 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1978:104541 CAPLUS
DN 88:104541
TI Conformational studies on bicyclic compounds containing hetero atoms: Part I. Synthesis and stereochemistry of some substituted azabicyclo[3.3.1]nonan-9-ones and azabicyclo[3.3.1]nonan-9-ols
AU Baliah, V.; Usha, R.
CS Dep. Chem., Annamalai Univ., Annamalainagar, India
SO Indian J. Chem., Sect. B (1977), 15(8), 684-9
CODEN: IJSBDB
DT Journal
LA English
AB Substituted 3-aza-, 3,7-diaza- and 3-thia-7-azabicyclo[3.3.1]nonan-9-ones subjected to Meerwein-Ponndorf-Verley (MPV) and LiAlH4 redns. gave 2 isomeric azabicyclo[3.3.1]nonan-9-ols (.beta.- and .alpha.-forms). The stereochem. course of the redn. is discussed.
IT **65712-24-5**
RL: PRP (Properties)
(IR spectrum of, conformation in relation to)
RN 65712-24-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1,5-dimethyl-2,4,6,8-tetraphenyl-, (2-endo,4-endo,6-exo,8-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

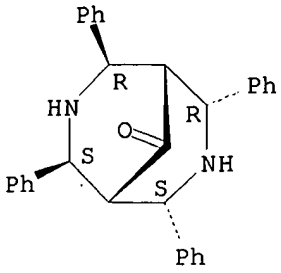


IT **60823-94-1 65732-77-6**
RL: RCT (Reactant)
(redn. of, stereochem. of)
RN 60823-94-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)

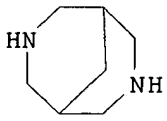


RN 65732-77-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, (2R,4S,6S,8R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



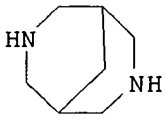
L13 ANSWER 81 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1977:601848 CAPLUS
DN 87:201848
TI Cytisine oxidation products (new synthesis of 1,3-diazaadamantane)
AU Orazgel'dyev, K. O.; Aslanov, Kh. A.; Sadykov, A. S.
CS USSR
SO Sb. Nauch. Rabot. Turkm. NII Selektsii i Semenovodstva Tonkovoloknist. Khlopchatnika (1976), (14), 156-68
From: Ref. Zh., Khim. 1977, Abstr. No. 4E102
DT Journal
LA Russian
AB Title only translated.
IT **280-74-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclocondensation reactions of)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



IT **64974-37-4P 64974-38-5P 64974-39-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 64974-37-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)

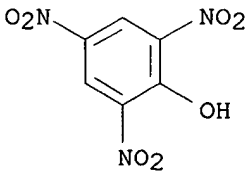
CM 1

CRN 280-74-0
CMF C7 H14 N2



CM 2

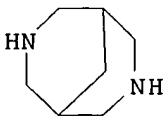
CRN 88-89-1
CMF C6 H3 N3 O7



RN 64974-38-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

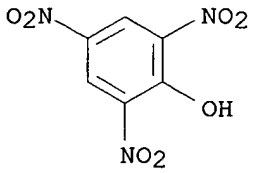
CM 1

CRN 280-74-0
CMF C7 H14 N2



CM 2

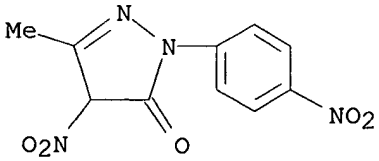
CRN 88-89-1
CMF C6 H3 N3 O7



RN 64974-39-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, compd. with 2,4-dihydro-5-methyl-4-nitro-2-(4-nitrophenyl)-3H-pyrazol-3-one (1:2) (9CI) (CA INDEX NAME)

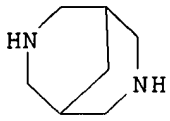
CM 1

CRN 550-74-3
CMF C10 H8 N4 O5

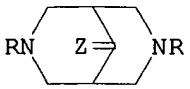


CM 2

CRN 280-74-0
CMF C7 H14 N2

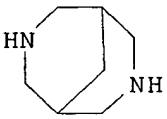

HN
NH

L13 ANSWER 82 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1977:29974 CAPLUS
DN 86:29974
TI Use of the Mannich reaction in the synthesis of bispidine
AU Ruenitz, Peter C.; Smissman, Edward E.
CS Sch. Pharm., Univ. Kansas, Lawrence, Kans., USA
SO J. Heterocycl. Chem. (1976), 13(5), 1111-13
CODEN: JHTCAD
DT Journal
LA English
GI

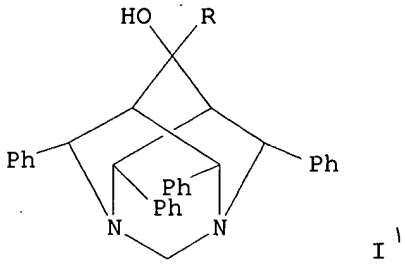


I, R=CH_2Ph, Z=O
II, R=CH_2Ph, Z=H_2
III, R=H, Z=H_2

AB N,N'-dibenzylbispidinone (I), obtained by Mannich condensation of N-benzyl-4-piperidone, was reduced (modified Wolff-Kishner) to give N,N'-dibenzylbispidine (II), whose hydrogenolysis gave bispidine (III).
IT **280-74-0P**
RL: PREP (Preparation)
(by Mannich reaction of benzylpiperidine with benzylamine and formaldehyde)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)

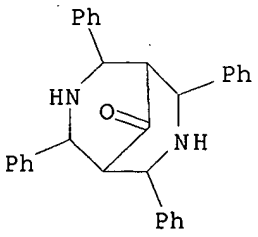


L13 ANSWER 83 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1976:577361 CAPLUS
DN 85:177361
TI Synthesis and stereochemistry of bicyclononane and adamantane heteroanalogs. III. Synthesis and some reactions of diazaadamantanes
AU Azerbaev, I. N.; Omarov, T. T.; Baisalbaeva, S. A.; Bazalitskaya, V. S.
CS Inst. Khim. Nauk, Alma-Ata, USSR
SO Izv. Akad. Nauk Kaz. SSR, Ser. Khim. (1976), 26(4), 55-7
CODEN: IKAKAK
DT Journal
LA Russian
GI

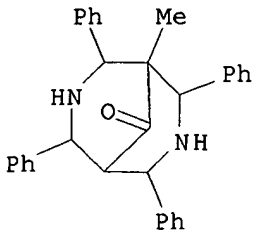


I

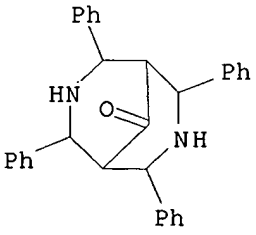
AB Diazabicyclononane I (R = C.tplbond.CH), obtained in 83.4% yield by addn. of HC.tplbond.CH to the corresponding ketone, was hydrogenated to give 94.4% I (R = Et) and treated with amines and CH2O in a Mannich reaction to give satisfactory yields of I (R = Et2NCH2, piperidinomethyl).
IT **37123-09-4 60823-94-1**
RL: RCT (Reactant)
(cyclocondensation of, by formaldehyde)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



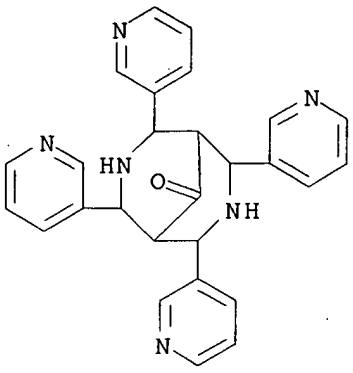
RN 60823-94-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)


Ph
Me
Ph
HN
O
NH
Ph
Ph

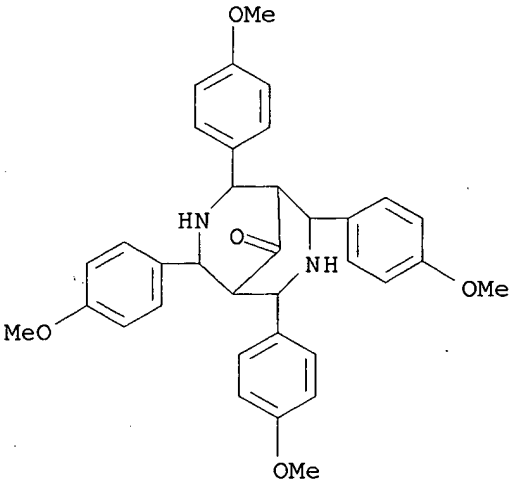
L13 ANSWER 84 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1976:560045 CAPLUS
DN 85:160045
TI Nitrogen compounds of adamontane. IX. Preparation and reactions of nitrogen analogs of adamantane
AU Kafka, Zdenek; Galik, Vlastimil; Safar, Milan
CS Lab. Synth. Fuels, Prague Inst. Chem. Technol., Prague, Czech.
SO Sb. Vys. Sk. Chem.-Technol. Praze, Technol. Paliv (1976), D32, 127-57
CODEN: SVCTA6
DT Journal
LA Czech
AB Substituted 1-aza-, 1,3-diaza-, 1,3,5-triazaadamantanes (I), and 1,3-diazaadamantan-6-ols (II) and their derivs. were prepd. and characterized by ir, gas chromatog., and paper chromatog. Reaction of Me2CO, AcONH4, and arom. aldehydes gave tetrasubstituted 3,7-diazabicyclo[3.3.1]nonan-9-ones, which gave 1,3-diazaadamantan-6-ones on boiling with paraformaldehyde. These compds. were hydrogenated to tetracyclohexyl derivs. of II over Raney Ni. The 7-nitro deriv. of I was prepd. and reduced to the 7-amino deriv. with Zn or Al in alk. medium. The latter compd. gave 7-halo compds. and other derivs. Arom. aldehydes and the 7-amino deriv. of I gave aldimines, which were hydrogenated to secondary amines. I was stable in mineral acids but not in a reducing acid medium. Reductive methylation of the 7-amino deriv. of I gave 7-alkylamino deriv. The nitrile of N-(1,3,5-triaza-1-adamantyl)aminoacetic acid, prepd. by cyanomethylation, was reduced to the 7-(aminomethyl)amino deriv. with LiAlH4. Partial hydrogenation of the 7-nitro deriv. of I gave the 7-hydroxylamino deriv., which with hexamethyldisilazane gave the trimethylsilyl deriv. Oxidn. with H2O2 or ozonization of the 7-nitro deriv. of I gave the N-oxide.
IT **37123-09-4P 55407-49-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenation of)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



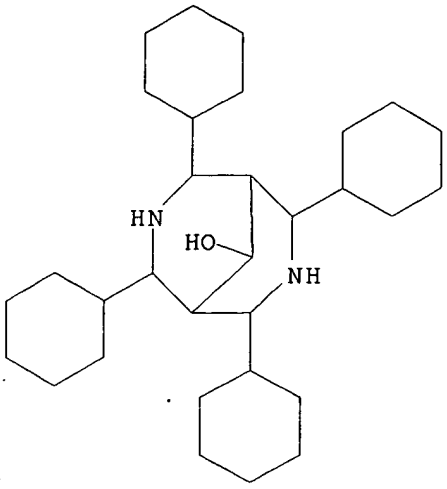
RN 55407-49-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetra-3-pyridinyl- (9CI) (CA INDEX NAME)



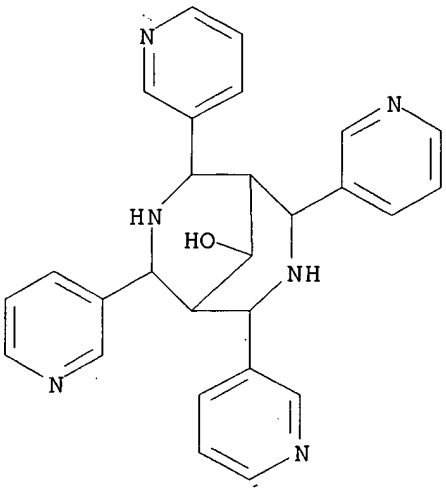
IT **55407-47-1P 55407-51-7P 55407-53-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 55407-47-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methoxyphenyl)-
(9CI) (CA INDEX NAME)



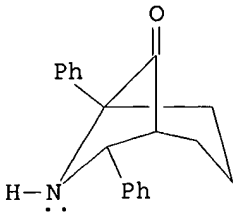
RN 55407-51-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 2,4,6,8-tetracyclohexyl- (9CI) (CA
INDEX NAME)



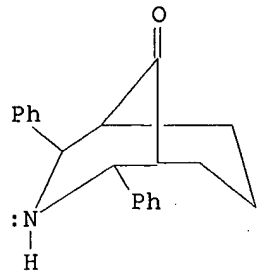
RN 55407-53-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 2,4,6,8-tetra-3-pyridinyl- (9CI) (CA INDEX NAME)



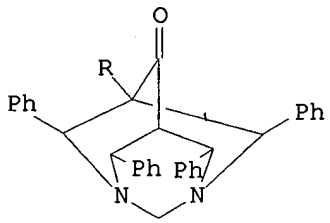
L13 ANSWER 85 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1976:542478 CAPLUS
DN 85:142478
TI Stereoisomerism of nitrogen p-electrons in some derivatives of azabicyclononane and azaadamantane
AU Azerbaev, I. N.; Omarov, T. T.; Al'mukhanova, K.; Baisalbaeva, S. A.
CS USSR
SO Zh. Org. Khim. (1976), 12(6), 1207-9
CODEN: ZORKAE
DT Journal
LA Russian
GI



I



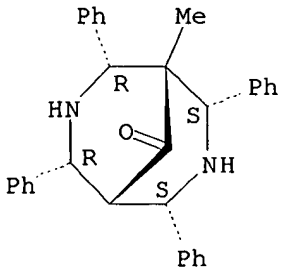
II



III

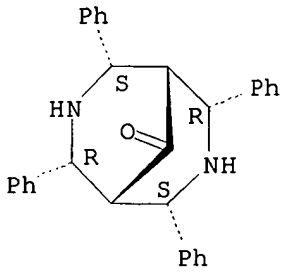
AB Isomeric I and II were isolated and characterized by their ir spectra. Their configurational assignments were supported by cyclization of the corresponding diazabicyclononanes to give III (R = H, Me).
IT **55588-88-0 55648-00-5**
RL: RCT (Reactant)
(cyclization of, with formaldehyde)
RN 55588-88-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl-, (endo,endo,endo,endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 55648-00-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, (endo,endo,endo,endo)- (9CI) (CA INDEX NAME)

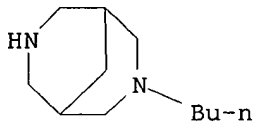
Relative stereochemistry.



L18 ANSWER 86 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1976:180182 CAPLUS
DN 84:180182
TI Analogues of sparteine. II. Synthesis of N-monoalkylbispidines and N,N'-dialkylbispidines
AU Smissman, Edward E.; Ruenitz, Peter C.
CS Sch. Pharm., Univ. Kansas, Lawrence, Kans., USA
SO J. Org. Chem. (1976), 41(9), 1593-7
CODEN: JOCEAH
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Bispidines I, structurally related to antiarrhythmic oxytocic sparteine, were prepd. The condensation of piperidones II (R = Me, Bu) with PhCH2NH2 and CH2O, followed by a modified Wolff-Kishner redn. gave I (R = Me, Bu; R1 = PhCH2). Hydrogenolysis of I (R1 = PhCH2) gave the N-alkylbispidines I (R = Me, Bu; R1 = H), which were acylated and then reduced using LiAlH4 to N,N'-dialkylbispidines I (R = Me, Bu; R1 = Et, PhCH2). Alkylation of I (R = Me, Bu, R1 = H) gave I (R = Me, R1 = Et, Bu, cyclohexylmethyl; R = R1 = Bu).
IT **58375-24-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 58375-24-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)

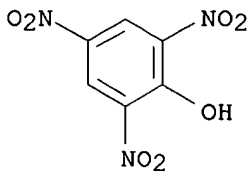
CM 1

CRN 58325-01-2
CMF C11 H22 N2



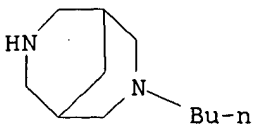
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

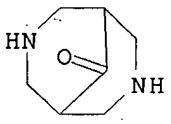


IT **58325-01-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn., alkylation, and acylation of)
RN 58325-01-2 CAPLUS

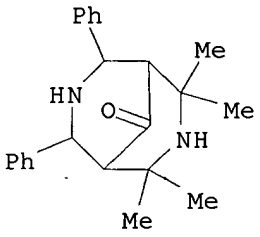
CN 3,7-Diazabicyclo[3.3.1]nonane, 3-butyl- (9CI) (CA INDEX NAME)



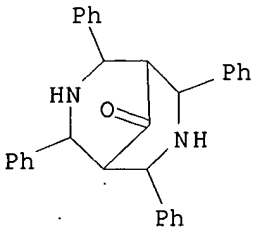
L13 ANSWER 87 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1975:578789 CAPLUS
DN 83:178789
TI Synthesis of 3-aza-3-methylbicyclo[3.3.1]nonan-9-one and some derivatives
AU Azerbaev, I. N.; Omarov, T. T.; Gubasheva, A. Sh.
CS USSR
SO Dokl. Resp. Nauchno-Tekh. Konf. Neftekhim., 3rd (1974), Volume 1, 437-9. Editor(s): Sarbaev, T. G. Publisher: Akad. Nauk Kaz. SSR, Inst. Khim. Nefti Prir. Solei, Guryev, USSR.
CODEN: 31GMAE
DT Conference
LA Russian
AB 2,4-Diphenyl-3-methyl-3-azabicyclo[3.3.1]nonan-9-one (I), bicyclo[3.3.1]nonan-9-one, and 3-aza-7-oxabicyclo[3.3.1]nonan-9-one were prepd. In the azabicyclononanones the unpaired electron pair on N influenced the reactivity of the ketones due to the interaction between the C:O group and the increased electron d. on the N; their C=O groups were less reactive than the C:O groups in other heterocyclic ketones. E.g., I was thoroughly hydrogenated on Pt oxide; on Raney Ni no H was absorbed. Very small yields were obtained from condensation reactions of the ketones. Alcs. were prepd. from the resp. ketones by treatment with Na in alc., Grignard reagents, C2H2 in the presence of alkali.
IT **57155-41-6P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reactivity of)
RN 57155-41-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one (9CI) (CA INDEX NAME)



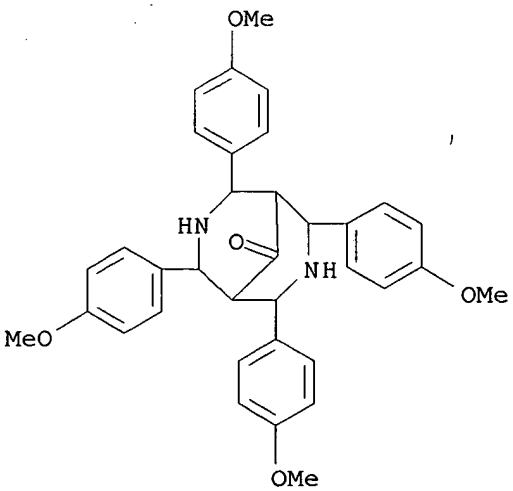
L43 ANSWER 88 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1975:514343 CAPLUS
DN 83:114343
TI Synthesis of 2,4-diphenyl-6,6,8,8-tetramethyl-3,7-diazaadamanthan-10-one
AU Azerbaev, I. N.; Omarov, T. T.; Baisalbaeva, S. A.
CS Inst. Khim. Nauk, Alma-Ata, USSR
SO Zh. Obshch. Khim. (1975), 45(6), 1404
CODEN: ZOKHA4
DT Journal
LA Russian
GI For diagram(s), see printed CA Issue.
AB The title compd. I was prepd. in 82% yield by cyclization of 2,4-diphenyl-6,6,8,8-tetramethyl-3,7-diazabicyclo[3.3.1]nonan-10-one with HCHO.
IT **56733-16-5**
RL: RCT (Reactant)
(cyclization reaction with formaldehyde)
RN 56733-16-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,2,4,4-tetramethyl-6,8-diphenyl- (9CI) (CA INDEX NAME)



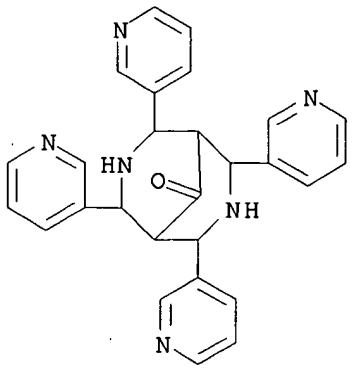
L13 ANSWER 89 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1975:170823 CAPLUS
DN 82:170823
TI Nitrogen compounds of adamantae. V. Reaction of tetrasubstituted bispidones and 1,3-diazaadamanthanones
AU Kafka, Z.; Galik, V.; Safar, M.
CS Lab. Synth. Fuels, Inst. Chem. Technol., Prague, Czech.
SO Collect. Czech. Chem. Commun. (1975), 40(1), 174-8
CODEN: CCCCAK
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Hydrogenation of the diazabicyclononane I and diazaadamantanones II (X = O, R = Ph, 4-MeOC6H4, 3-pyridyl) on Raney Ni at 150-200.degree. and 100 atm gave I and II (X = H, OH; R = cyclohexyl, 4-methoxycyclohexyl, 3-pyridyl). Hydrogenation of II (X = O, R = 3-pyridyl) also gave 23% 2,6-di(3-pyridyl)piperidin-4-ol.
IT **37123-09-4P 55407-47-1P 55407-49-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenation of)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



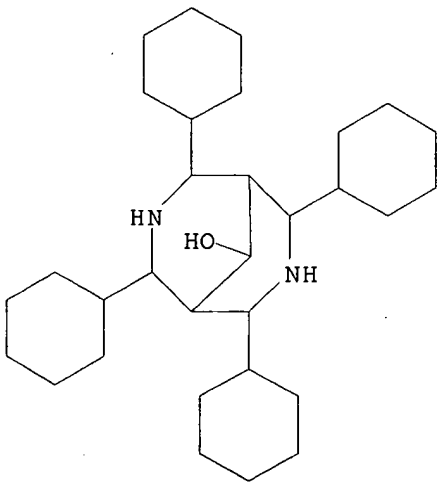
RN 55407-47-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetrakis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



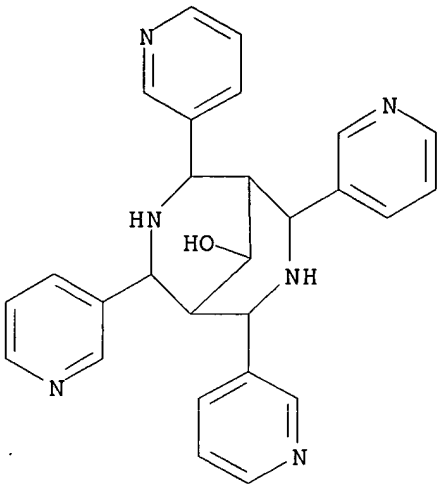
RN 55407-49-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetra-3-pyridinyl- (9CI) (CA INDEX NAME)



IT **55407-51-7P 55407-53-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 55407-51-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 2,4,6,8-tetracyclohexyl- (9CI) (CA INDEX NAME)

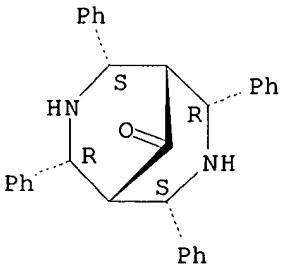


RN 55407-53-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 2,4,6,8-tetra-3-pyridinyl- (9CI) (CA INDEX NAME)


N
N
HN
HO
NH
N
N

L13 ANSWER 90 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1975:156245 CAPLUS
DN 82:156245
TI Synthesis and stereochemistry of bicyclononane hetero analogs. II. Synthesis of some aza- and diazabicyclo[3.3.1]nonan-9-ones
AU Azerbaev, I. N.; Omarov, T. T.; Gubasheva, A. Sh.; Al'mukhanova, K. A.; Baisalbaeva, S. A.
CS USSR
SO Vestn. Akad. Nauk Kaz. SSR (1975), (2), 47-50
CODEN: VANKAM
DT Journal
LA Russian
GI For diagram(s), see printed CA Issue.
AB Mannich reaction of cyclohexanone, PhCHO, and NH4OAc gave 54% 2,4-diphenyl-3-azabicyclo[3.3.1]nonan-9-one and 31% 2,6-dibenzylidenecyclohexanone. Similar reaction of 2,6-diphenyl-N-piperidinone (I) and 3-methyl-2,6-diphenyl-4-piperidinone (II) gave the diazabicyclononanones III (R = H, Me) via stereospecific condensation at the axial protons at C-3 and C-5 of I and II. The rate of condensation of II was less than that of I and 3,5-dimethyl-2,6-diphenyl-4-piperidinone did not react at all.
IT **55588-87-9P 55588-88-0P 55588-89-1P**
55648-00-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 55588-87-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, dihydrochloride, (endo,endo,endo,endo)- (9CI) (CA INDEX NAME)

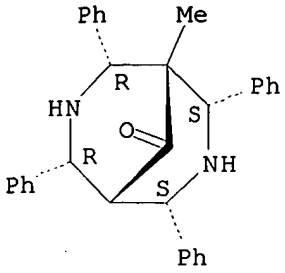
Relative stereochemistry.



●2 HCl

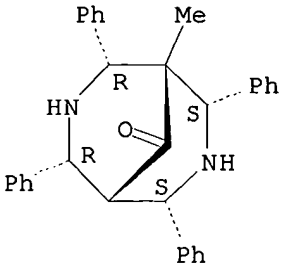
RN 55588-88-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 1-methyl-2,4,6,8-tetraphenyl-, (endo,endo,endo,endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 55588-89-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 5-methyl-2,4,6,8-tetraphenyl-, dihydrochloride, (endo,endo,endo,endo)- (9CI) (CA INDEX NAME)

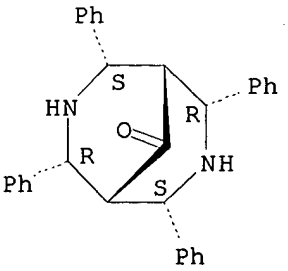
Relative stereochemistry.



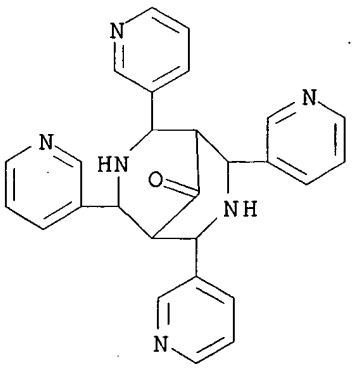
●2 HCl

RN 55648-00-5 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl-, (endo,endo,endo,endo)- (9CI) (CA INDEX NAME)

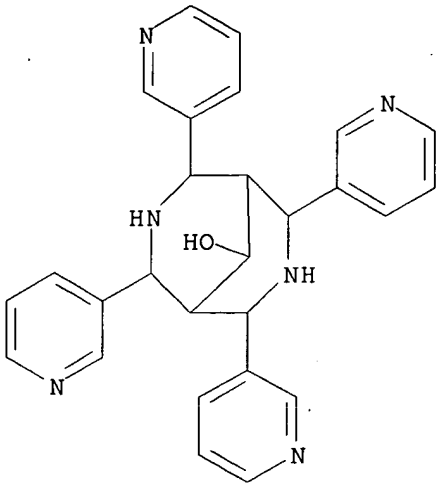
Relative stereochemistry.



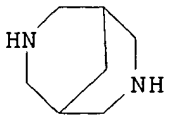
L18 ANSWER 91 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1975:80110 CAPLUS
DN 82:80110
TI Nitrogen compounds of adamantane. IV. Paper chromatography of azaadamantane derivatives
AU Kafka, Z.; Safar, M.; Galik, V.
CS Lab. Synth. Fuels, Inst. Chem. Technol., Prague, Czech.
SO Collect. Czech. Chem. Commun. (1974), 39(11), 3268-71
CODEN: CCCCAK
DT Journal
LA English
AB The sepn. of 1-azaadamantane (I) and its quaternary salts, 1,3-diazaadamantane (II) and its tetrasubstituted derivs., and 1,3,5-triazaadamantane (III) and its derivs. was studied by descending chromatog. on Whatman no. 1 paper at 20.degree.. The Rf values in various solvents are tabulated. Good sepn. of I and its quaternary salts was achieved by using a solvent system contg. HCl and an alc. with a branched chain, e.g. iso-PrOH or 2-methyl-1-propanol. For the sepn. of II and its derivs., HCl was replaced by HOAc; but the best results were obtained by using 20:1:4 EtOH-NH4OH(25%)-H2O. For the sepn. of III and its derivs. a neutral solvent system, i.e. alcs.-H2O was used. For the detection of I and II and their derivs., Dragendorff's reagent was used. To detect III and its derivs., which do not contain either a primary or a secondary amino group, a soln. of 4-dimethylaminobenzaldehyde in EtOH and HCl was used. The quaternary salts of I and derivs. of III were applied as aq. solns.; derivs. of II were dissolved in HOAc or in EtOH-HCl.
IT **55407-49-3 55407-53-9**
RL: ANST (Analytical study); PROC (Process)
(sepn. of, by paper chromatog.)
RN 55407-49-3 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetra-3-pyridinyl- (9CI) (CA INDEX NAME)



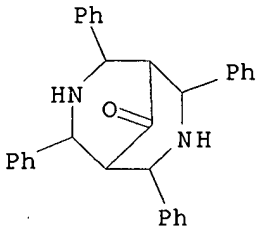
RN 55407-53-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-ol, 2,4,6,8-tetra-3-pyridinyl- (9CI) (CA INDEX NAME)


N
N
HN
HO
NH
N
N

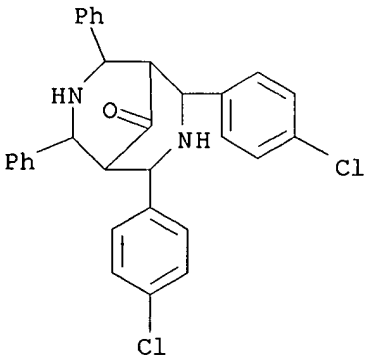
L13 ANSWER 92 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1973:442379 CAPLUS
DN 79:42379
TI Nitrogen-containing adamantanoid compounds. II. Synthesis of 1,3-diazoadamantane
AU Galik, Vlastimil; Landa, Stanislav
CS Vys. Sk. Chem. Technol., Prague, Czech.
SO Collect. Czech. Chem. Commun. (1973), 38(4), 1101-3
CODEN: CCCCAK
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB 1,3-Diazaadamantane (I) was prepd. $CH_2[CH(CO_2Et)_2]_2$ via $CH_2[CH(CH_2OH)_2]_2$, $CH_2[CH(CH_2Br)_2]_2$, and 3,7-diazabicyclo- [3.3.1]nonane (II). II refluxed in C_6H_6 with paraformaldehyde gave I.
IT **280-74-0**
RL: RCT (Reactant)
(reaction of, with paraformaldehyde, diazaadamantane by)
RN 280-74-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane (6CI, 8CI, 9CI) (CA INDEX NAME)



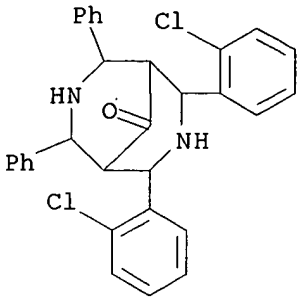
L13 ANSWER 93 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1972:501556 CAPLUS
DN 77:101556
TI Synthesis of 3-thia-7-aza- and 3,7-diazabicyclo[3.3.1]nonane derivatives
AU Baliah, V.; Usha, R.
CS Dep. Chem., Annamalai Univ., Annamalainagar, India
SO Indian J. Chem. (1972), 10(3), 319-20
CODEN: IJOCAP
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB 2,4-Diphenyl-6,8-diaryl-3-thia-7-azabicyclo[3.3.1]nonan-9-ones e.g. I were prepd. by condensing both cis- and trans-2,6-diphenyltetrahydrothiapyran-4-one with aromatic aldehydes and ammonium acetate in EtOH. A similar condensation using 2,6-diphenyl-4-piperidone gives 2,4-diphenyl-6,8-diaryl-3,7-diazabicyclo[3.3.1]nonan-9-ones e.g. II.
IT **37123-09-4P 37123-10-7P 37123-11-8P**
37123-12-9P 37123-13-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 37123-09-4 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4,6,8-tetraphenyl- (6CI, 9CI) (CA INDEX NAME)



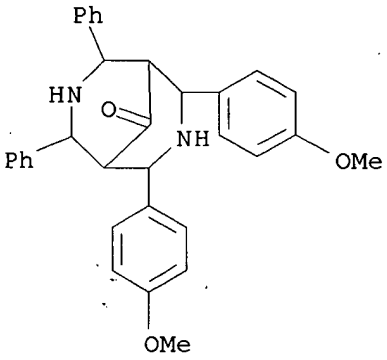
RN 37123-10-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(4-chlorophenyl)-6,8-diphenyl- (9CI) (CA INDEX NAME)



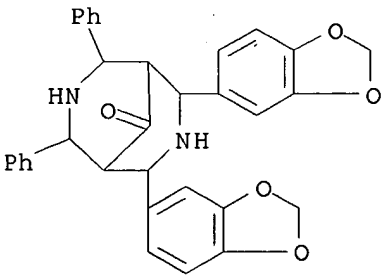
RN 37123-11-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(2-chlorophenyl)-6,8-diphenyl- (9CI) (CA INDEX NAME)



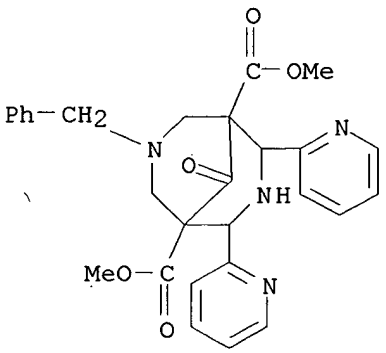
RN 37123-12-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(4-methoxyphenyl)-6,8-diphenyl- (9CI) (CA INDEX NAME)



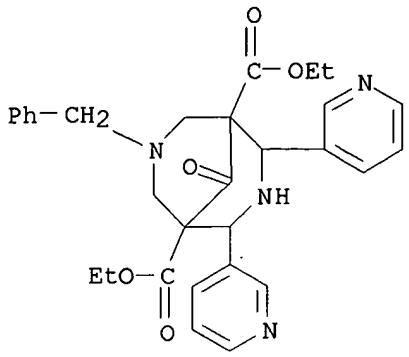
RN 37123-13-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonan-9-one, 2,4-bis(1,3-benzodioxol-5-yl)-6,8-diphenyl- (9CI) (CA INDEX NAME)



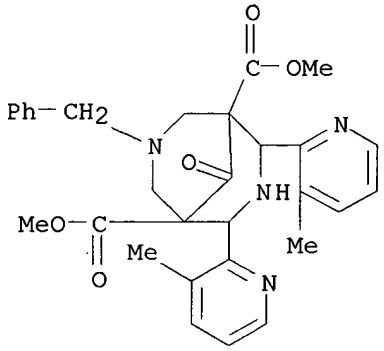
L18 ANSWER 94 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1972:71608 CAPLUS
DN 76:71608
TI NMR spectra of substituted 3,7-diazabicyclo[3.3.1]nonan-9-ones
AU Haller, R.; Unholzer, H.
CS Pharm. Inst., Univ. Freiburg, Freiburg/Br., Ger.
SO Arch. Pharm. (Weinheim) (1971), 304(11), 866-71
CODEN: APBDAJ
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB The 60- and 220-MHz PMR spectra of the title compds. (I, R = 2-pyridyl, 3-pyridyl, 4-pyridyl, or 6-methyl-2-pyridyl; R1 = Me or Et; R2 = Me or CH2Ph) and some of their N3-d derivs. in CDCl3 were examd. and the coupling consts. and chem. shifts vs. Me4Si as internal std. were detd. Couplings between vicinal NH and CH protons were obsd. in (3-pyridyl)-substituted I. The NMR spectra in relation to the configuration of I were discussed.
IT **5184-93-0 5498-19-1 35569-34-7**
35569-36-9 35569-38-1 35612-71-6
RL: PRP (Properties)
(NMR of)
RN 5184-93-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-oxo-7-(phenylmethyl)-2,4-di-2-pyridinyl-, dimethyl ester (9CI) (CA INDEX NAME)



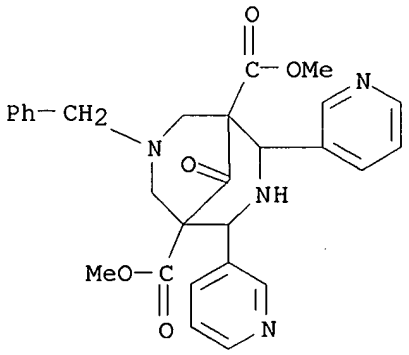
RN 5498-19-1 CAPLUS
CN 3,4-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-oxo-7-(phenylmethyl)-2,4-di-3-pyridinyl-, diethyl ester (9CI) (CA INDEX NAME)



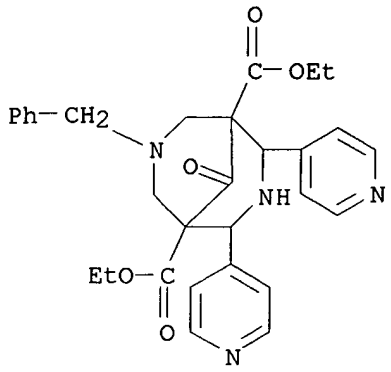
RN 35569-34-7 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 2,4-bis(3-methyl-2-pyridinyl)-9-oxo-7-(phenylmethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



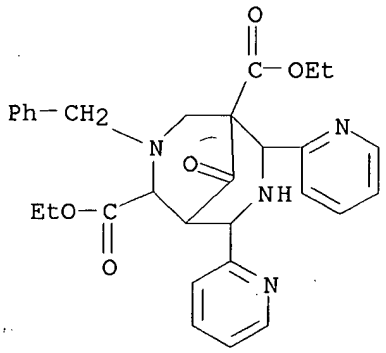
RN 35569-36-9 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-oxo-7-(phenylmethyl)-2,4-di-3-pyridinyl-, dimethyl ester (9CI) (CA INDEX NAME)



RN 35569-38-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-oxo-7-(phenylmethyl)-2,4-di-4-pyridinyl-, diethyl ester (9CI) (CA INDEX NAME)

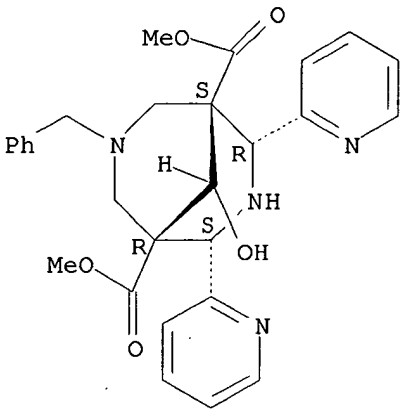


RN 35612-71-6 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,4-dicarboxylic acid, 9-oxo-3-(phenylmethyl)-6,8-di-2-pyridinyl-, diethyl ester (9CI) (CA INDEX NAME)

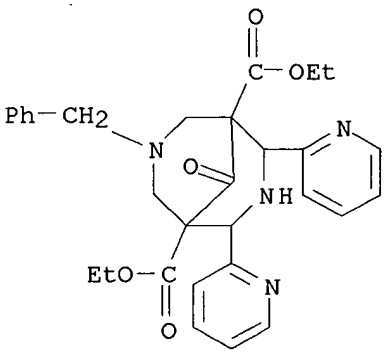


L18 ANSWER 95 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1972:3821 CAPLUS
DN 76:3821
TI Substituted 3,7-diazabicyclo[3.3.1]nonan-9-ols
AU Haller, R.; Unholzer, H.
CS Pharm. Inst., Univ. Freiburg, Freiburg/Breisgau, Ger.
SO Arch. Pharm. (Weinheim) (1971), 304(9), 654-9
CODEN: APBDAJ
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB The title compds. (I, R = H or Me, R1 = 2- or 3-pyridyl, R2 = Me or Et, R3 = Me or CH2Ph) were prepd. by redn. of the corresponding 9-oxo compds. with NaBH4 at very high stereoselectivity. The stereochemistry of the methoiodide of I (R = H, R1 = 2-pyridyl, R2 = R3 = Me) was elucidated by nuclear Overhauser effect measurements.
IT **36332-85-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 36332-85-1 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-hydroxy-7-(phenylmethyl)-2,4-di-2-pyridinyl-, dimethyl ester, (endo,endo,syn)- (9CI) (CA INDEX NAME)

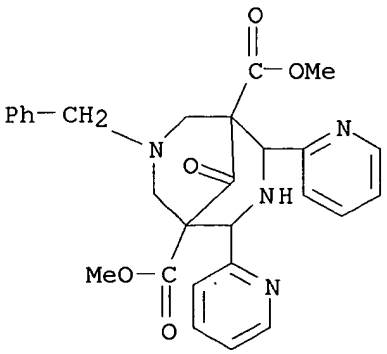
Relative stereochemistry.



L23 ANSWER 96 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1969:101290 CAPLUS
DN 70:101290
TI Metal chelates of (2-pyridyl)-substituted 3,7-diazabicyclo[3.3.1]nonanones
AU Haller, Rolf
CS Pharm. Inst., Univ. Freiburg/Br., Freiburg/Br., Ger.
SO Arch. Pharm. (Weinheim) (1969), 302(2), 113-18
CODEN: APBDAJ
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB Hot alc. L reacts with an equal molar quant. of alc. transition metal salt to give MLX2 (M, X, R, R1, yield (%), m.p. (decompn.) given): Fe, SCN, Me, CH2Ph, 89, -; Co, SCN, Me, CH2Ph, 74, 210-12.degree.; Cd, SCN, Me, CH2Ph, 69, 180.degree.; Ni, SCN, Et, CH2Ph, 76, 212-15.degree.; Mn, Cl, Et, Me, 71, 242.degree.. The ir spectra studied indicate that the azabicyclic complexes contain tetradentate ligands.
IT **4698-62-8 5184-93-0**
RL: PRP (Properties)
(spectrum of, ir)
RN 4698-62-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 7-benzyl-9-oxo-2,4-di-2-pyridyl-, diethyl ester (7CI, 8CI) (CA INDEX NAME)



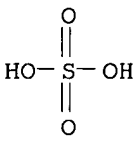
RN 5184-93-0 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 9-oxo-7-(phenylmethyl)-2,4-di-2-pyridinyl-, dimethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 97 OF 97 CAPLUS COPYRIGHT 2001 ACS
AN 1968:436077 CAPLUS
DN 69:36077
TI A novel ring closure and amine quaternization under Eschweiler-Clarke conditions
AU Smissman, Edward E.; Weis, James A.
CS Sch. of Pharm., Univ. of Kansas, Lawrence, Kans., USA
SO J. Heterocycl. Chem. (1968), 5(3), 405
CODEN: JHTCAD
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB 1,3-Diazaadamantane sulfate (I) is prepd. 3,7-Diazabicyclo[3.3.1]nonane sulfate (II) is treated with HCHO and HCO2H to give 1,3-diazaadamantane-1-methonium sulfate (III). N.M.R. data for I and III are given.
IT **20027-05-8**
RL: RCT (Reactant)
(cyclization of)
RN 20027-05-8 CAPLUS
CN 3,7-Diazabicyclo[3.3.1]nonane, sulfate (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9
CMF H2 O4 S



CM 2

CRN 280-74-0
CMF C7 H14 N2